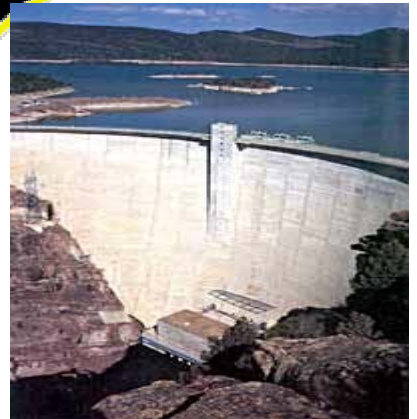


Daggett County

With Manila and Dutch John

Transportation Master Plan



DRAFT REPORT
2004

Prepared By
UDOT Planning Section
4501 South 2700 West
Salt Lake City, Utah 84114-3600

Daggett County

With Manila and Dutch John

Transportation Master Plan

County Commission	Chad L. Reed Craig Collett Stewart Leith
Mayor of Manila	Chuck Dickison
Town Council	Connie Reed Ida Marie Twitchell Lenita W. Steinaker Dellene Alvis
Planning & Zoning Chair.....	Joe Wahlquist
Town of Manila's Engineer	Gerald D. Smith
County Road Supervisor	Clyde Slaugh
Sheriff	Allen Campbell

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* If available for this study

1. Introduction

1.1. Background

Origin of county name: after Ellsworth Daggett who helped develop irrigation for the county; Principal cities/towns: Dutch John (285), Manila (272); Economy: electric power generating, lumbering, livestock; Points of interest: Flaming Gorge Recreational Area, Ashley National Forest.

Daggett County is located on the north slope of the Uinta Mountains which are unique in that they comprise the only major mountain range in North America that runs primarily east and west.

The Uintas also contain the highest peaks in the state. Leidy Peak at 12,028 feet is the highest peak in the county. The Uintas are the source of much of the water for the Green River which cuts through the Uintas at the east end of the range. The county is bordered on the north by Wyoming, on the east by Colorado, on the south by Uintah and Duchesne counties and on the west by Summit County.

Rich with trees, water, and wildlife, Daggett County was the summer hunting grounds for Indians of Wyoming and Utah. The first known white men to visit the county were fur trappers who came to the mountains in the 1820s trapping for beaver. Perhaps the most famous of these was General William Henry Ashley. In 1825, after organizing a fur company in St. Louis, Ashley traveled to the Green River country to see for himself the land of the beaver and other wildlife. That same year he floated down the Green into the Uinta Basin and then traveled by horse and foot through Summit County back to southern Wyoming where the first rendezvous was held. Other trappers and traders soon followed in the footsteps of Ashley. In 1837 Fort Davey Crockett was built at Brown's Hole by Philip Thompson and William Craig. The fort supplied goods to the trappers of the area. Wislezenus, a German traveler, described Fort Crockett as being "somewhat poverty stricken, for which reason it is also known to the trappers by the name of Fort Misery."

In 1869 and 1871 John Wesley Powell visited parts of Daggett County. Starting at Green River, Wyoming, Powell floated down the Green and Colorado rivers and on each trip he studied the geology and geography, animal and plant life, and the Indians who lived in the area.

About this same time it was rumored that the Uinta Mountains were full of diamonds. Important and wealthy people in America and in Europe invested in the claims, hoping to make a lot of money. They soon found out that the discovery of diamonds in the Uintas was a hoax.

Daggett County was used for the summer grazing of sheep and cattle trailed in from parts of northern Utah and southwestern Wyoming. Until the introduction of irrigation in the 1890s by Adolph Jessen, Ellsworth Daggett, R. C. Chambers, and others made it possible for farmers and their families to live there. The first permanent settlers included the James Warby and Franklin Twitchell families. In 1917 the state legislature created Daggett County out of the northern part of Uintah County, and Manila was named the county seat. Daggett was the last of the state's counties (29) to be organized.

Daggett County's economy is based primarily on the raising of livestock, hay, and alfalfa, but it is also an important producer of electric power for Utah and surrounding states. A new town, Dutch John, was built near Flaming Gorge to provide a living place for people who work at the dam. Flaming Gorge Reservoir is a popular place for boating and fishing.

This information was provided from www.onlineutah.com, in an article written by Craig Fuller.

1.2. Study Need

Daggett County has seen a 33.48% population increase within the last decade as apposed to a –10.27% population decrease the decade before. From 1970 to 2000, the population has increased 38.29%. Population in the Daggett County area has gone through cyclical changes, but the overall trend shows very consistent increase in the population. A well-established transportation plan is needed to provide direction for continual maintenance and improvements to Daggett County’s transportation system.

Daggett County has an adopted a General Plan. The Daggett County General Plan briefly describes the transportation needs of this area. With the aging infrastructure of Daggett County’s transportation system and the need for system improvements, a more extensive transportation plan is necessary for Daggett County and the surrounding area.

Some of the major transportation issues around the State are as follows:

- Safety
- Railroad crossings
- Trails (bicycle, pedestrian, & OHV)
- Signals
- City interchange aesthetics
- Connectivity of roadways
- Property access
- Truck traffic
- Alternate routes
- Speed limits

Daggett County recognizes the importance of building and maintaining safe roadways, not only for the auto traffic but also for pedestrians and bicyclists.

1.3. Study Purpose

The purpose of this study is to assist in the development of a transportation master plan for Daggett County. This plan could be adopted by Daggett County as a companion document to the county’s General Plan. With the transportation master plan in place the city can qualify for grants from the State Quality Growth Commission.

The primary objective of the study is to establish a solid transportation master plan to guide future developments and roadway expenditures. The plan includes two major components:

- Short-range action plan
- Long-range transportation plan

Short-range improvements focus on specific projects to improve deficiencies in the existing transportation system. The long-range plan will identify those projects that require significant advance planning and funding to implement and are needed to accommodate future traffic demand within the study area.

1.4. Study Area

The study area includes Daggett County, and land adjacent to it. A general location map is shown in Figure 1-1. A more detailed map of the study area and city limits is shown in

Figure 1-2. The study area was developed by Daggett County and approved by the Daggett County Transportation Master Plan Technical Advisory Committee.

The roadway network within the study area includes SR-43, SR-44 and US-191. Each of these roadways provides a vital function to Daggett County. SR-43 connects areas to the North from I-80 including an important route to the City of Evanston, Wyoming. US-191 connects the area to the south. This route is important as it provides access to Uintah County, Vernal, and The Uintah Basin, along with other state and national parks. SR-43 is the Main Street in Manila and serves local business and community circulation needs. SR-44 also serves the community to the South of Manila as it heads toward the South and East toward Flaming Gorge. These roadways along with the local road network are shown in Figure 1-2.



1.5. Study Process

The study, which began in November 2004, is proceeding as a cooperative effort between Daggett County, UDOT, and local community members. It is being conducted under the guidance of Daggett County Officials. The following individuals participated in the initial meetings to provide input used to create this document. This group listed below will be referred to as the Technical Advisory Committee or "TAC" for this document.

Chuck Dickison
Chad L. Reed
Allen Campbell
Gretchen Northcott
Martin Rose
B. Twitchell
Brian Raymond
James Olsen
Clyde Slaugh
Sean Hughes
Ross Catron
Sue Olorenshaw
Roy Steen
Richard Zohner
Floyd Briggs
Jean Slaymaker
Jim Archibald
Robert Pelly
Daniel B. Kuhn
Paul Vidmar

Mayor, Manila
Commissioner, Daggett County
Sheriff, Daggett County
Economic Development, Manila
Dutch John Special Service District
Dutch John SSD Chairman
Economic Development, Daggett County
Roads Department, Daggett County
Roads Department, Daggett County
Roads Department, Daggett County
Ecoteam Leader, FGRD, Ashley NF
Planning and Zoning, Daggett County
Utah Highway Patrol
Fire Chief
School Board Transportation Director
MT View Sub President
UDOT Region 3 Station Supervisor
UDOT Planning
UDOT Planning, Freight Planner
UDOT Planning

Figure 1-1: Daggett County
Study Area Location

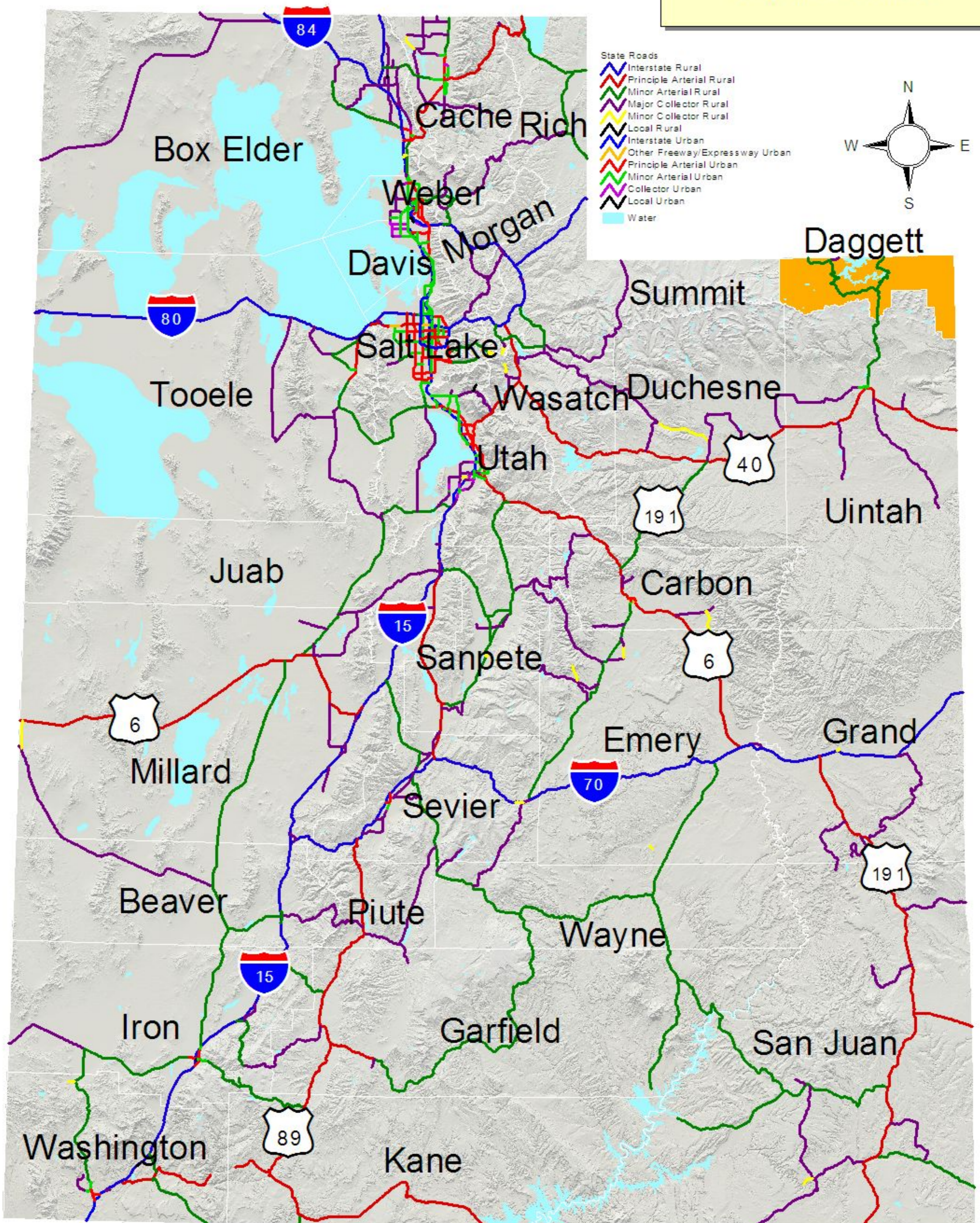
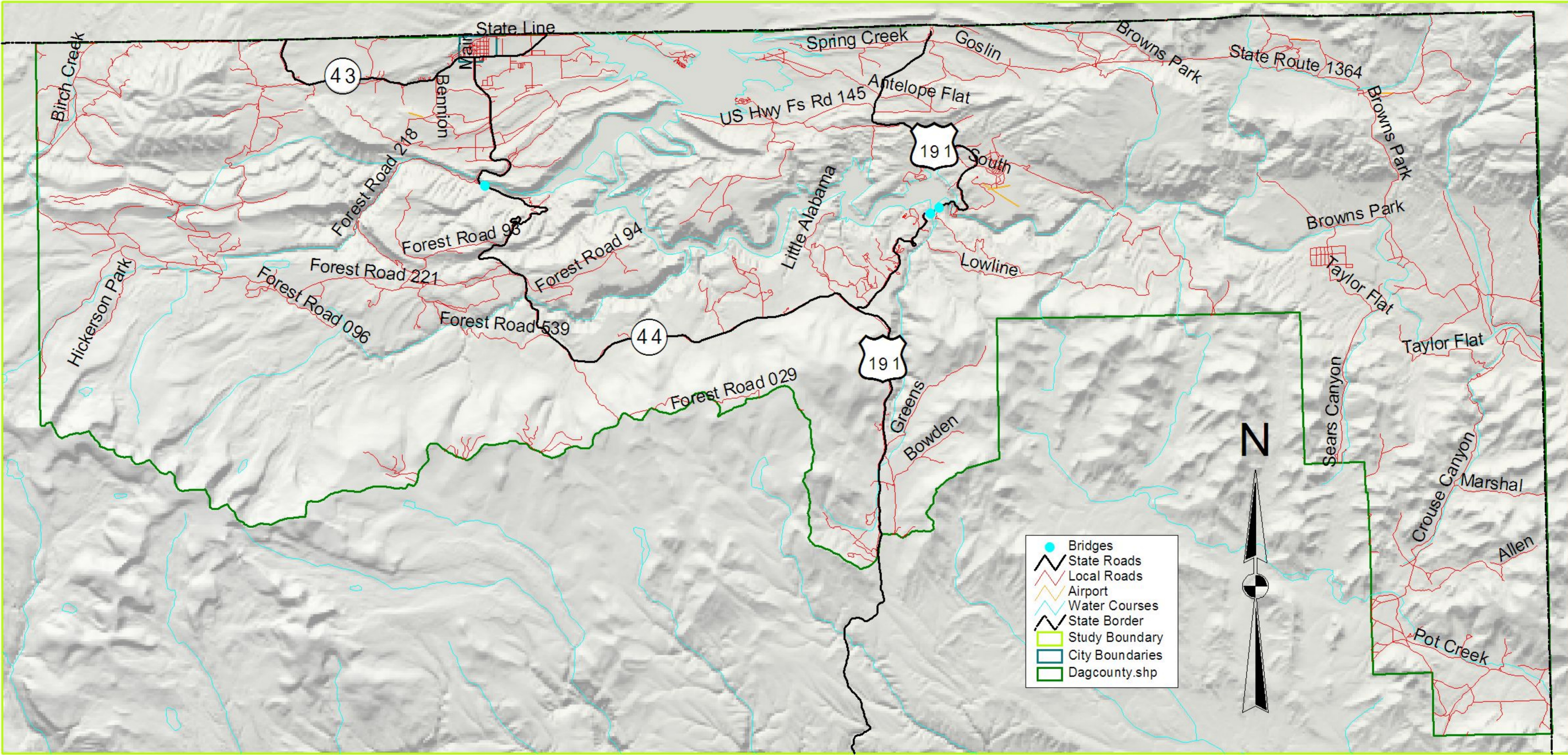


Figure 1-2: Daggett County
Study Area Vicinity



2 0 2 4 6 8 10 Miles

The study process for the Daggett County Transportation Master Plan consist of three basic parts: (1) inventory and analyze existing conditions, (2) project future conditions, and (3) development of a transportation master plan (TMP). This process involves the participation of the TAC for guidance, review, evaluation and recommendations in developing the TMP to include development of future projects for the identified study area.

The TAC will evaluate each part of the study process. Their comments will be incorporated into the study's draft final report. The remainder of the draft final report will focus on the recommendation and implementation portion of the transportation plan program. Transportation projects that will be recommended for the short-term and long-range needs will be developed based on the TAC's recommendations and concurrence.

The study process allows for the solicitation of input from the public at two TAC workshops. This public participation element is included in the study process to ensure that any decisions made regarding this study are acceptable to the community.

The first TAC workshop will provide an inventory and analysis of existing conditions and identify needed transportation improvements. The second TAC workshop will focus on prioritizing projects, estimating costs, and discussion of the funding processes.

The TAC is expected to recommend those comments that are to be incorporated into the report and applicable to the goals of this study. The draft final report and the final report will be submitted to the County for review and comments.

Upon local review of the draft report, UDOT will prepare appropriate changes and submit the final report to the County for approval. The final report will describe the study process, findings and conclusions, and will document the analysis of the recommended transportation system projects and improvements.

2. Existing Conditions

An inventory and evaluation of existing conditions within the study area was conducted to identify existing transportation problems or issues. The results of the investigation follow.

2.1. Land Use

In order to analyze and forecast traffic volumes, it is essential to understand the land use patterns within the study area. Daggett County's General Plan outlines a need for land use classifications and annexation plans. By analyzing the patterns or changes in land use, we can better predict the ever-changing transportation needs.

The Dutch John Special Service District Zoning map follows on the next page.

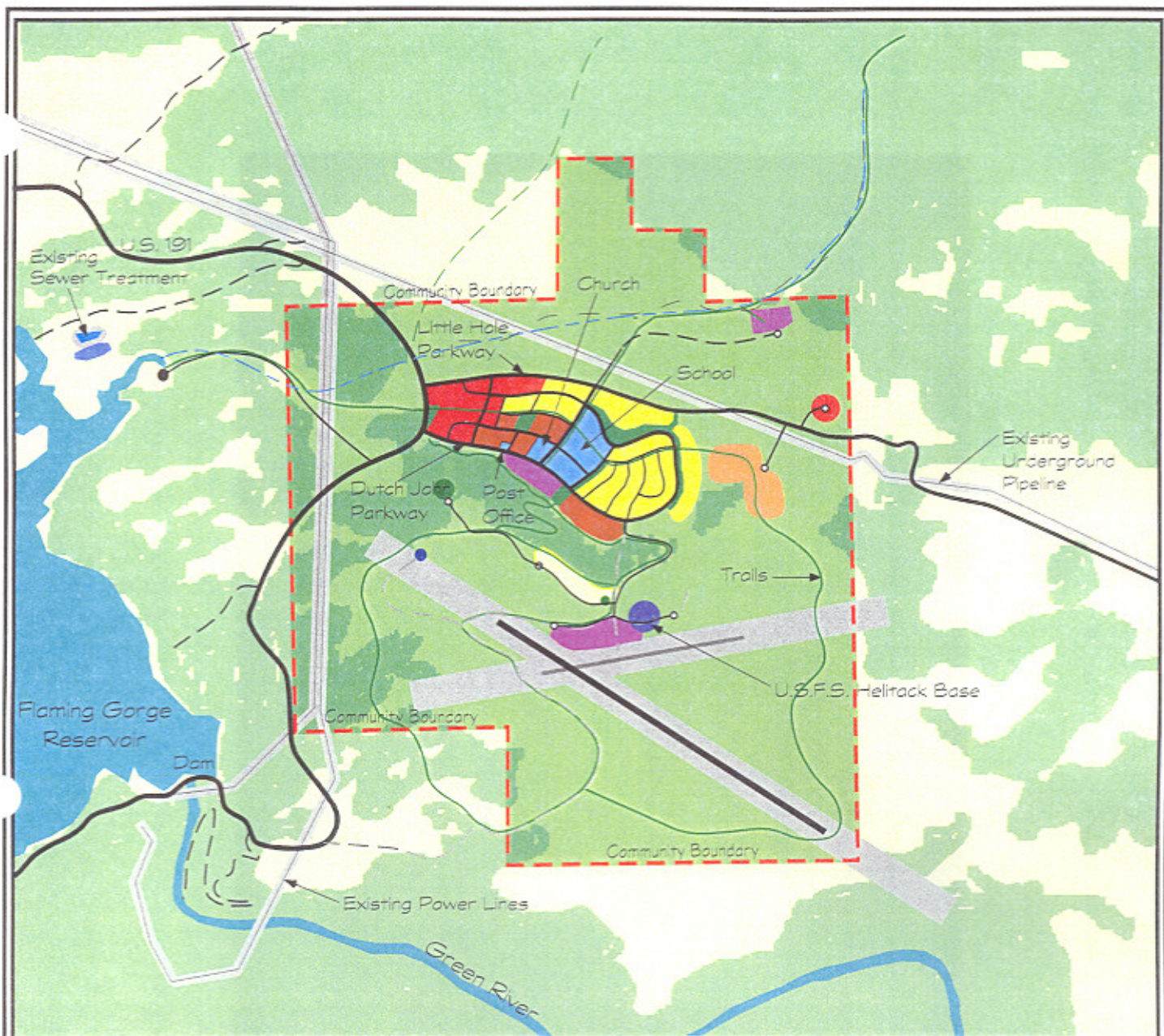
2.2. Environmental

In Utah there are a variety of local environmental issues. Each of the cities and counties need to look at what are the environmental issues in their areas on a case-by-case basis. There are many resources that can help local entities to determine what issues need to be addressed and how any problems that may exist can be resolved.

Some of the environmental concerns around the State are wetlands, endangered species, archeological sites, and geological sites among other issues. Environmental concerns should be addressed when looking at an area for any type of improvement to the transportation system. Specific issues mentioned in the Daggett County General Plan are slope, soil, stream corridors, ridgelines, critical wildlife habitat, public access, view corridors, wetlands, and flood plains. Protecting the environment is a critical part of the transportation planning process.

2.3. Socio-Economic (Census Brief: Cities and Counties of Utah, May 2001)

Daggett County ranked 29th for population in the State of Utah, out of 29 incorporated Counties. Historical growth rates have been identified for this study, because past growth is usually a good indicator of what might occur in the future. Chart 2-1 identifies the population growth over the past 50 years for the State of Utah, Daggett County and Manila. Chart 2-2 identifies that population change in Daggett County has ranged from gaining 219.78% between 1950 and 1960 to losing -42.78% between 1960 and 1970, while growth in the State has gained between 18 and 38 percent during the past 50 years.



Dutch John, Utah

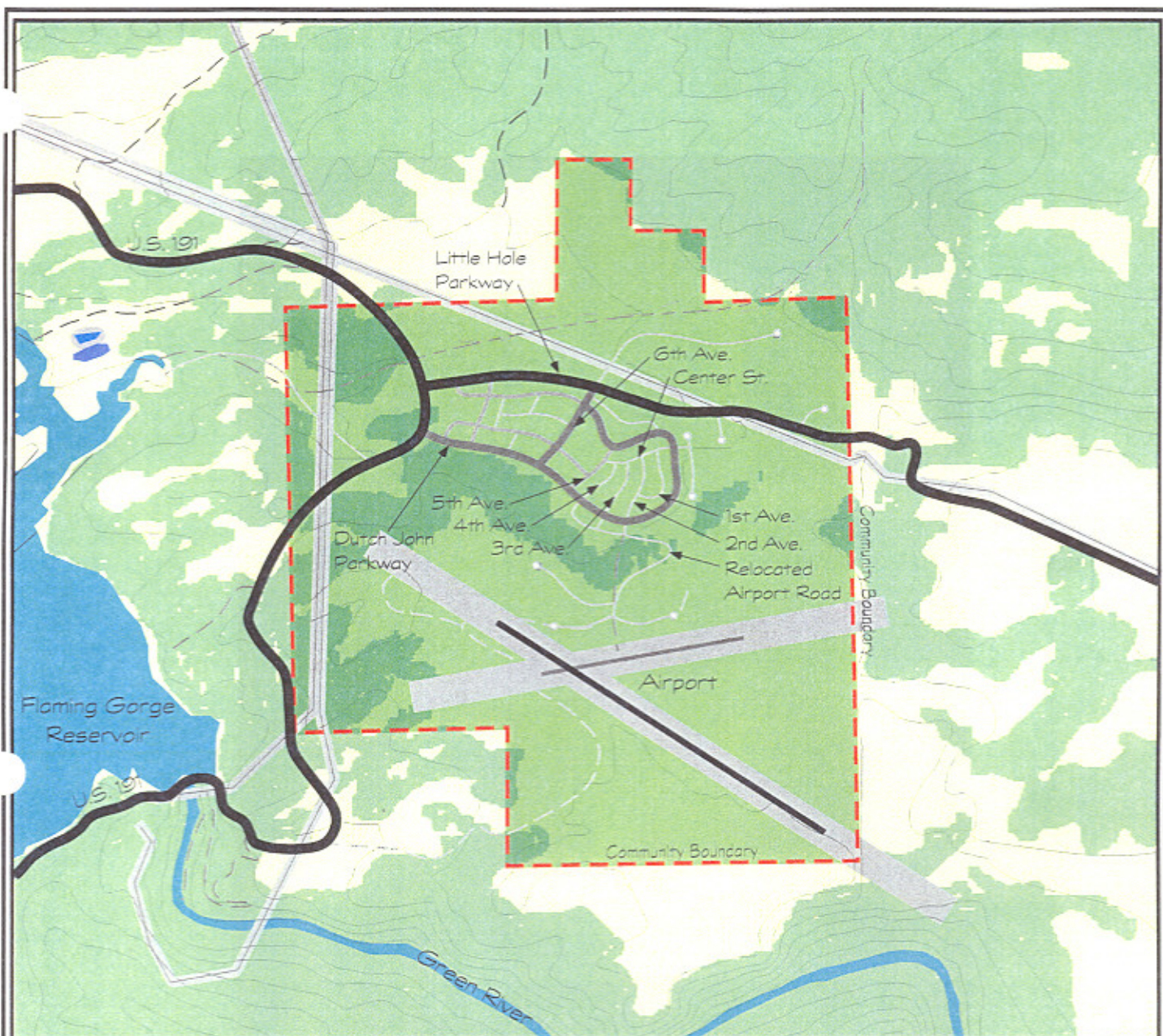
2001 Zoning Map

0 2000
Scale
12/01



ZONING CATEGORIES

	COMMERCIAL		RESIDENTIAL MOBILE HOME
	INDUSTRIAL		RESIDENTIAL TRADITIONAL
	PUBLIC		RESIDENTIAL ESTATE
	RESIDENTIAL ATTACHED		PRESERVATION ZONE



Dutch John, Utah

2001 General Plan

0 2000
Scale
12/01



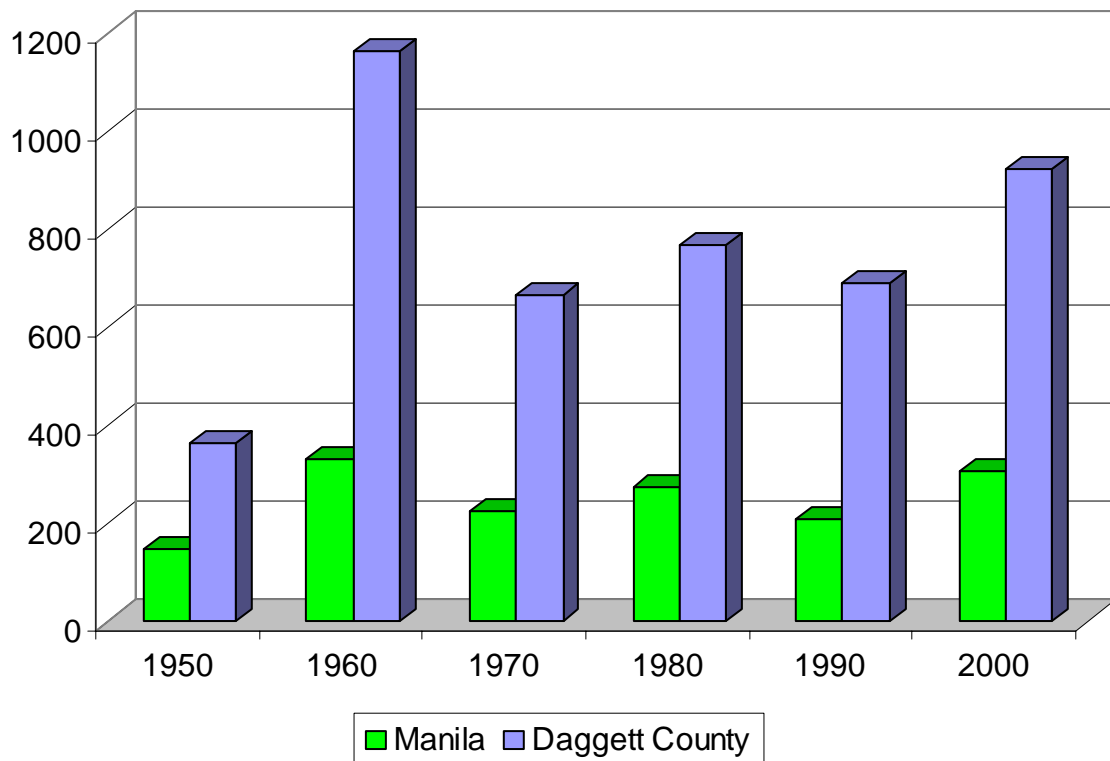
ROADWAY MASTER PLAN

Principle Artery	
Collector Road	
Local Collector Road	
Local Road	

Chart 2-1. Population Data

Year	Population		
	Utah	Daggett County	Manila
1950	688,862	364	147
1960	890,627	1,164	329
1970	1,059,273	666	226
1980	1,461,037	769	272
1990	1,722,850	690	207
2000	2,233,169	921	308

Population



Source: U.S. Bureau of the Census

<http://www.governor.utah.gov/dea/OtherPublications.html>

Chart 2-3 identifies yearly population growth rates for the State of Utah and Daggett County. Though the State population has grown every decade from 1950 until 2000, Daggett County has also showed a slower rate of growth in population over the same period.

Daggett County has some unique demographic characteristics when compared with the State, particularly with age demographics. In the 25 to 54-age category, the State is at 38.6% the County is at 42.8%. For the 65+-age category, the State is at 8.5%, Daggett County is at 13.5%. The State's median age is 27.1 years and the Daggett County's median age is 39.2 years old. Another interesting statistic is that of Veteran status with State at 10.7%, Daggett County is 16.4%.

The 2000 median household income in Daggett County is \$30,833, compared to the State median household income of \$45,726.

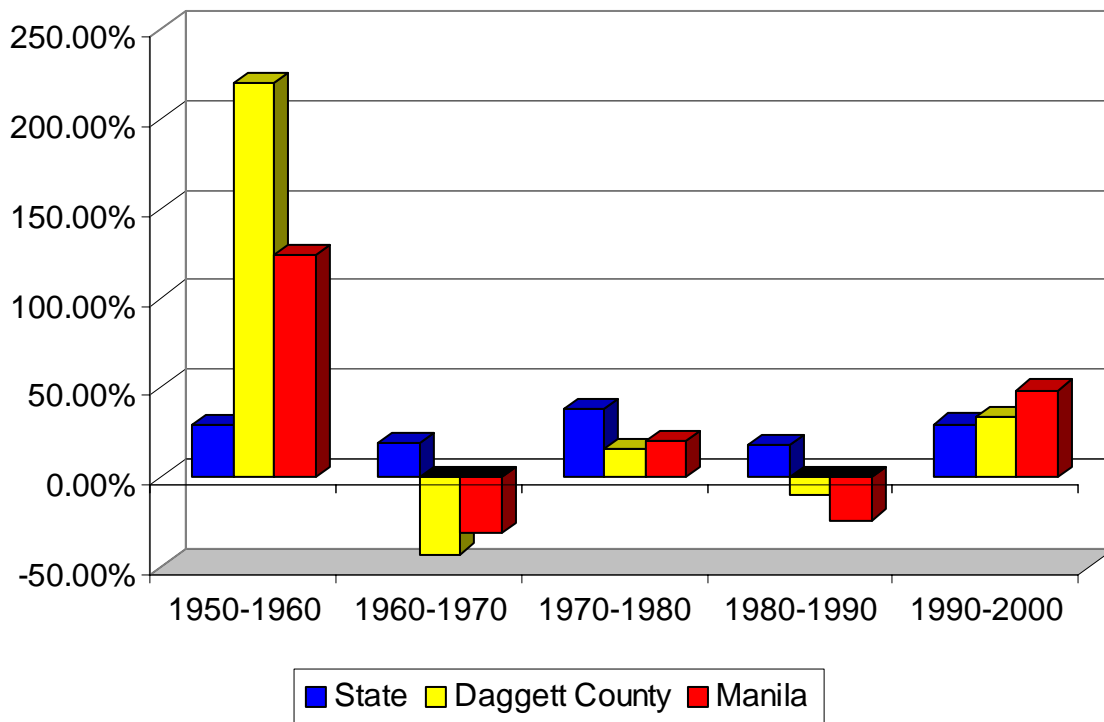
The unemployment rate in Daggett County was 7.7 percent in 2000. According to the Utah Department of Employment Security (UDES), in 2000 there were approximately 381 employed people in Daggett County or 51.3% of the population. The County has 32 unemployed people, which is 4.3% of the population.

The majority of employees in Daggett County work in two primary employment sectors: Government and Services as shown in Chart 2-5. In the county, these sectors make up 53.52% of the labor force. Another interesting note was that housing built from 1990-2000 were 14.0% of total for Daggett County compared to 25% for the state. Also homes built before 1939 were 9.6% of the total for Daggett County with 10% for the state.

Chart 2-2. Population Change Data

Decade	State of Utah	Daggett County	Manila
1950-1960	29.29%	3.18%	219.78%
1960-1970	18.94%	-2.39%	-42.78%
1970-1980	37.93%	47.65%	15.47%
1980-1990	17.92%	5.87%	-10.27%
1990-2000	29.62%	28.59%	33.48%

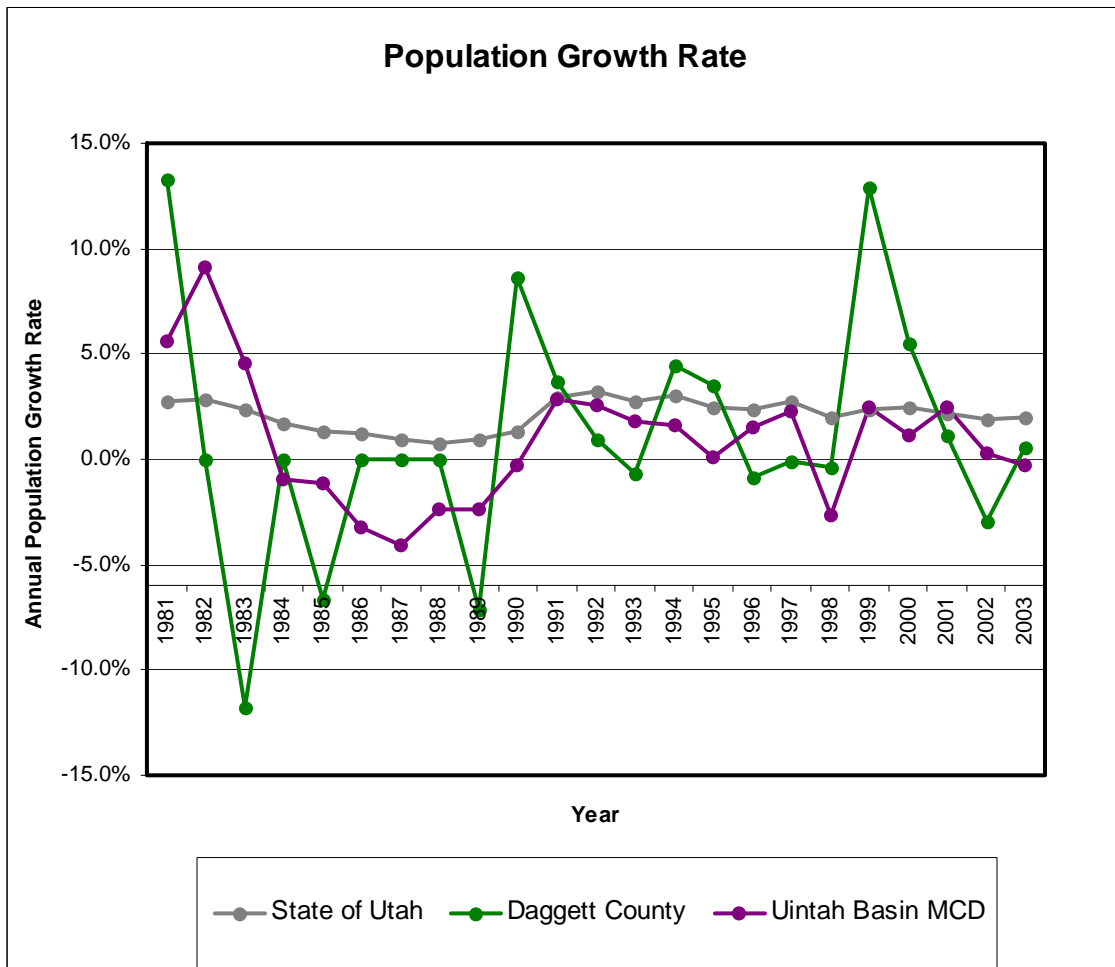
Decenial Population Change



Source Data: U.S. Bureau of the Census

<http://www.governor.utah./dea/OtherPublications.html>

Chart 2-3. Population Growth Rate (1980-2000)

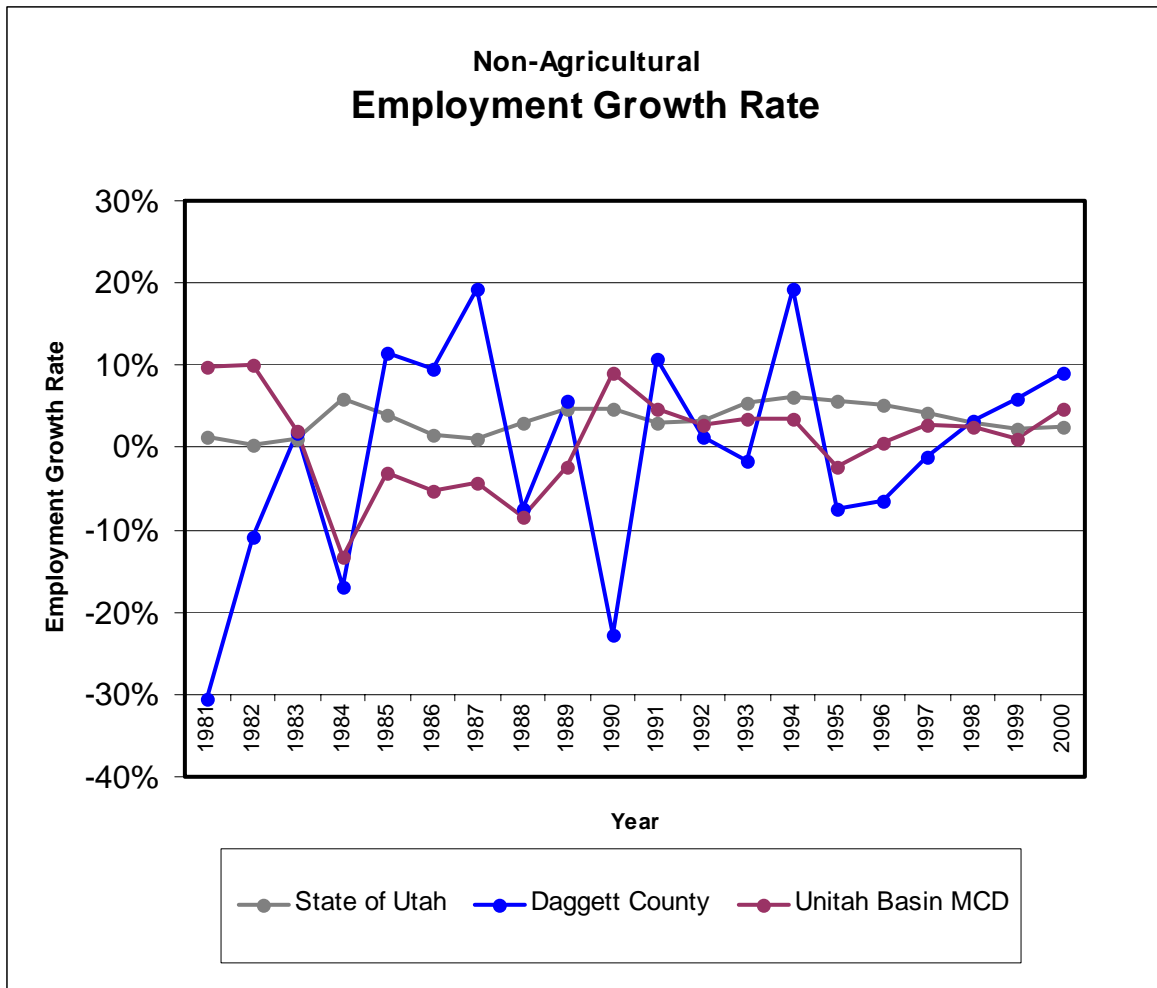


MCD = Multi-County Districts, Uintah Basin MCD = Daggett, Duchesne & Uintah Counties

Source: Governors Office of Planning and Budget

<http://www.governor.utah.gov/dea>

Chart 2-4. Employment Growth Rate (1980-2000)



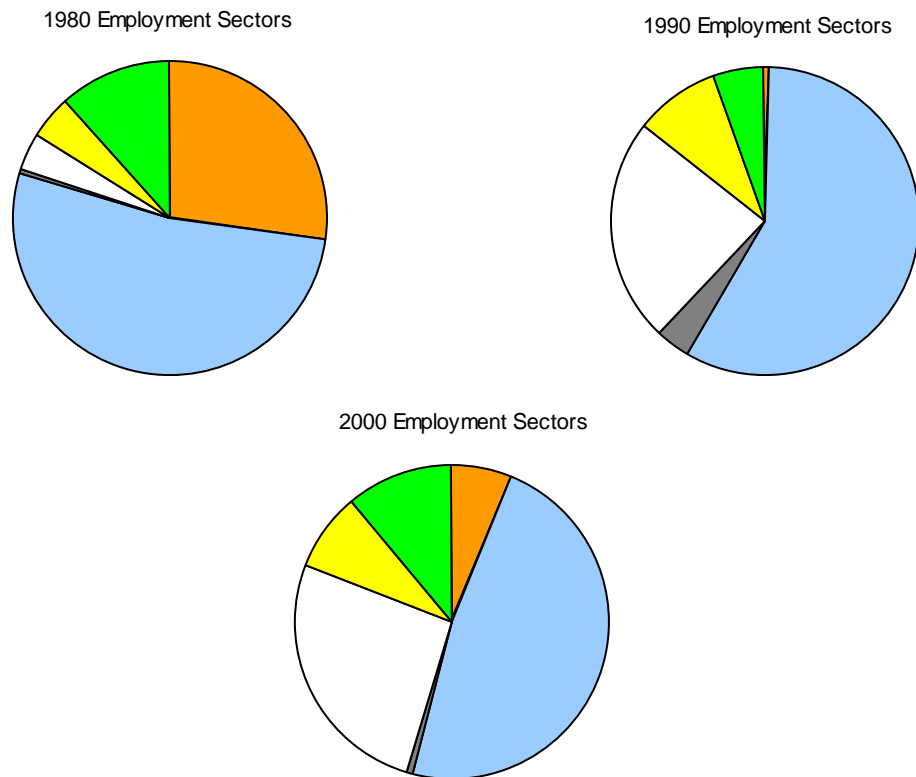
MCD = Multi-County Districts, Uintah Basin MCD = Daggett, Duchesne & Uintah Counties

Source: Governors Office of Planning and Budget
<http://www.governor.utah.gov/dea>

Chart 2-5. Employment Sectors (1980-2000)

Sector	1980	1990	2000	Δ% 1980-2000
Construction	22.96%	0.45%	4.65%	-68.82%
FIRE	0.00%	0.00%	0.00%	0.00%
Government	43.70%	43.12%	34.29%	20.90%
Manufacturing	0.49%	2.71%	0.32%	0.00%
Mining	0.00%	0.00%	0.00%	0.00%
Services	3.21%	18.06%	19.23%	823.08%
TCPU	3.70%	6.77%	5.77%	140.00%
Trade	9.88%	4.06%	8.01%	25.00%

FIRE = Finance, Insurance & Real Estate
 TCPU = Telecommunications & Public Utilities



Source: Governors Office of Planning and Budget
<http://www.governor.utah.gov/dea/HistoricalData.html>

2.4. Functional Street Classification

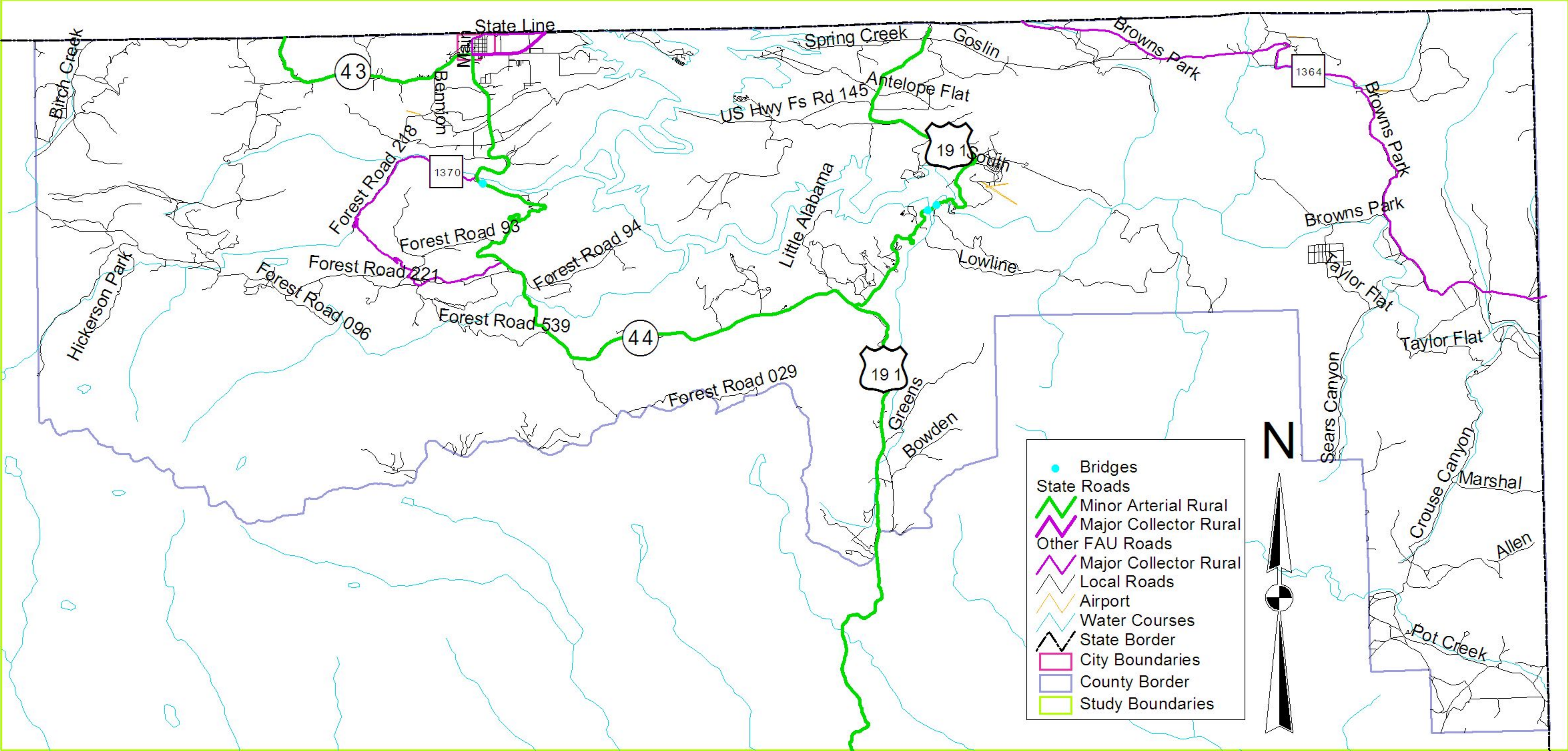
This document identifies the current function and operational characteristics of the selected roadway network of Daggett County. Functional street classification is a subjective means to identify how a roadway functions and operates when a combination of the roadway's characteristics are evaluated. These characteristics include; roadway configuration, right-of-way, traffic volume, carrying capacity, property access, speed limit, roadway spacing, and length of trips using the roadway.



The primary classifications used in classifying selected roadways of Daggett County are: Interstate, Principle Arterial, Minor Arterial, Major Collector, Minor Collector and Local. An Arterial's function is to provide traffic mobility at higher speeds with limited property access. Traffic from the local roads is gathered by the Collector system, which provides a balance between mobility and property access trips. Local streets and roads serve property access based trips and these trips are generally shorter in length.

Daggett County is accessed by US-191 as well as by SR-43. US-191 bisects the County North to South. SR-43 travels south out of Manila to US-191, which travels east toward Flaming Gorge. The functionally classified system is currently being revised statewide. The current functionally classified system generally defines the higher traffic roads, so only minor additions or changes will be required.

Figure 2-2: Existing State and Federal Routes Functional Classification



2.5. Bridges

There are three bridges on the state system located in the study area that could be eligible for federal bridge maintenance, rehabilitation, or replacement funds. Bridges are maintained and minor repairs made with maintenance funds. A bridge is rehabilitated or replaced as it deteriorates over time and as traffic volumes increase. (Figure 2-3 Bridge Sufficiency Rating)

Table 2-1 compares the bridges in the study area and identifies their sufficiency rating and location. Sufficiency rating indicates current condition of the structure with a rating of 100 showing a structure that is in excellent shape. A rating nearing 50 will reveal a structure that is in need of attention and is eligible for federal funding.

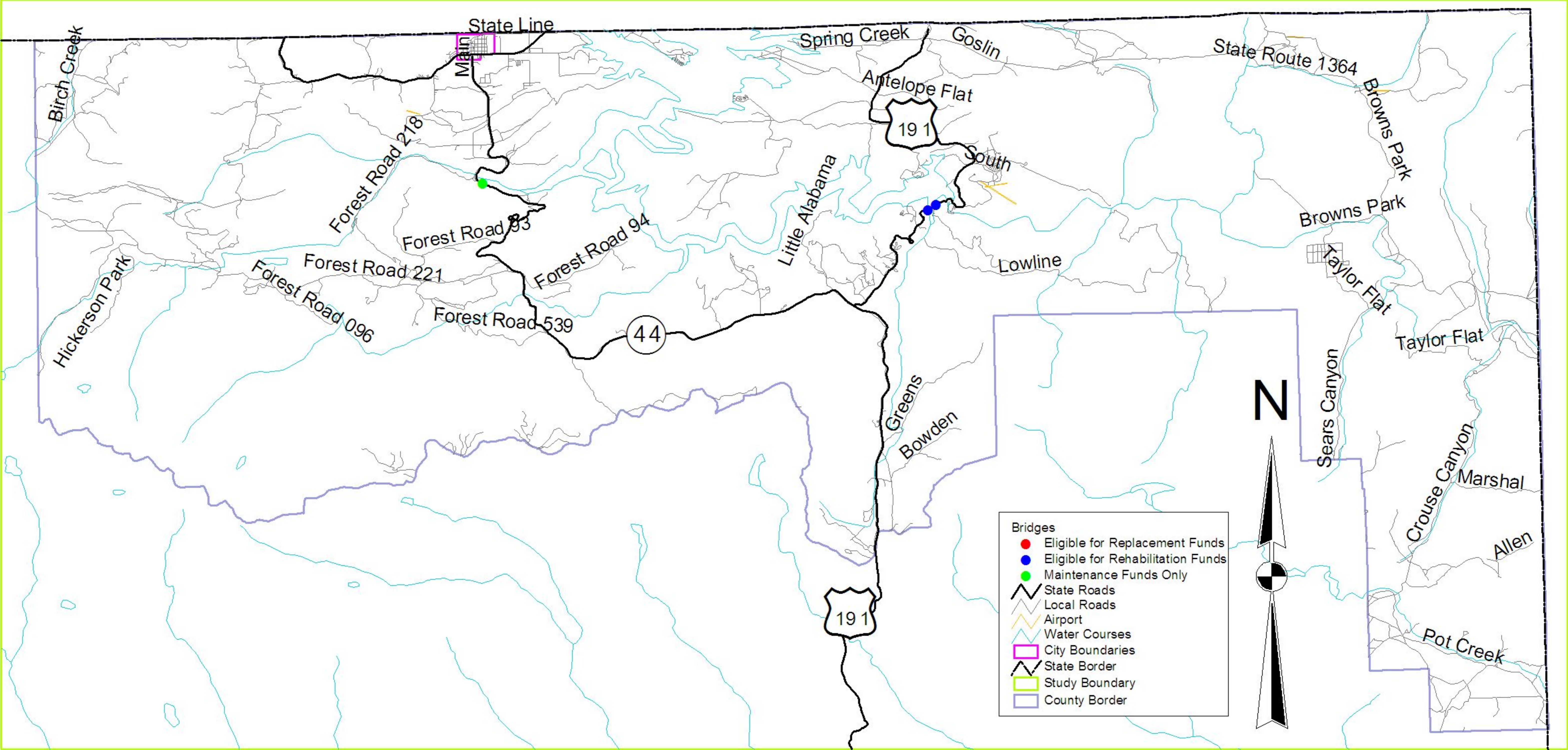
Table 2-1. Bridges

Number	Location	Maximum Span	No. Lanes & Road Width	Sidewalk	Sufficiency Rating
E-1979	SR-44 / Sheep Creek	6.1m	2 Lanes, 9.10m	No	85.6
C-372	SR-191 / Cart Creek Bay	173.1m	2 Lanes, 9.6m	No	52.5
C-724	SR-191, Flaming Gorge Dam	152.5m	2 Lanes, 8.54m	Yes	76.6

Source: Utah Department of Transportation/Structures Division



Figure 2-3: Bridge Sufficiency Rating



2.6 Traffic Counts

Recent average daily traffic count data were obtained from UDOT. Table 2-2 shows the traffic count data on the key roadways of the study area. The number of vehicles in both directions that pass over a given segment of roadway in a 24-hour period is referred to as the average annual daily traffic (AADT) for that segment.

Table 2-2. Average Annual Daily Traffic

Road	Segment	Year	AADT
SR-43	Wyoming/Utah State Line	2002	830
SR-43	West Incorporated Limits Manila	2002	1,220
SR-43	Junction SR-44 in Manila	2002	1,415
SR-43	East Incorporated Limits Manila	2002	1,020
SR-44	Junction US-191 Greendale Junction	2002	780
SR-44	South Incorporated Limits Manila	2002	705
US-191	Uintah / Daggett Line	2002	1,240
US-191	Flaming Gorge Dam	2002	907
US-191	Utah / Wyoming State Line	2002	907

Source: Utah Department of Transportation

2.7 Traffic Accidents

Traffic accident data was obtained from UDOT's database of reported accidents from 2002. Table 2-3 summarizes the accident statistics for those segments for the year 2002. Additional information includes the average daily traffic, the number of reported accidents, and the accident rates. The roadway segment accident rates were determined in terms of accidents per million vehicle miles traveled. The crash rates for each roadway segment are compared to the expected crash rate for similar facilities across the state.

Upon review of the accident data for the state system, there appears to be a higher than expected accident rates at the following locations:

- On SR-43 From the Utah/Wyoming State Line to Manila
- On US-191 From the Flaming Gorge Dam to the Utah/Wyoming State Line

The remainder of the state system shows a lower than expected accident rate. Figure 2-4 shows accident data taken from 1999-2001, which shows various segments of the state highway system and associated accident data.

Daggett County may wish to review the accident history for the local street system to identify any specific accident hot spot locations.

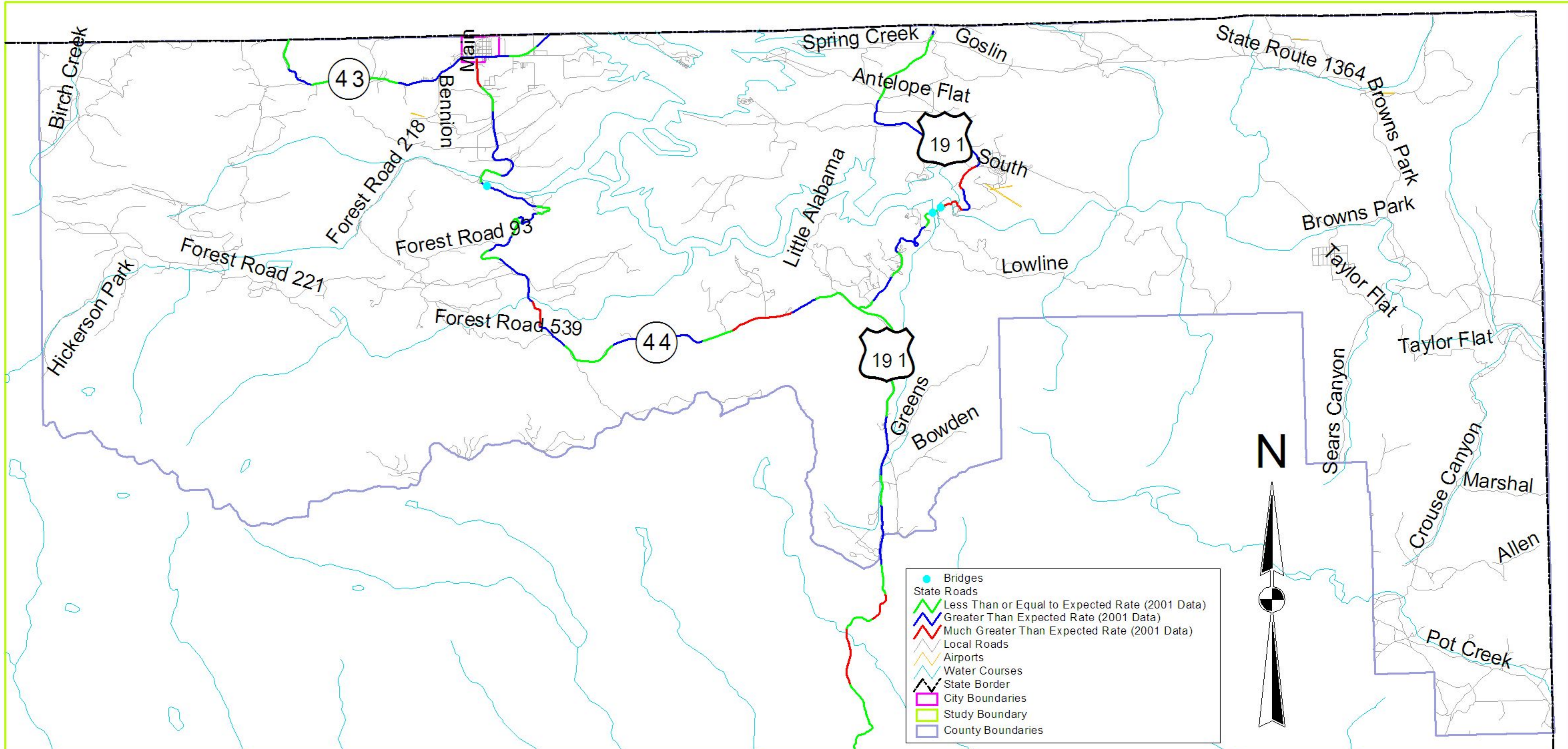
Table 2-3. Crash Data 2002

Road	From Milepost	End Milepost	ADT (2002)	# Crashes (2002)	Crash Rate	
					Actual	Expected*
43	0	7.41	830	5	2.46	2.40
43	7.42	7.92	1220	0	0.00	2.40
43	7.93	8.68	1415	1	1.82	2.53
43	8.69	10.54	1020	1	1.53	2.53
44	0	27.74	780	13	1.86	2.40
44	27.75	27.9	705	0	0.00	2.40
191	218.59	236.2	1240	15	1.86	2.40
191	236.21	242.36	1300	3	1.05	2.40
191	242.37	253.09	907	7	4.31	2.40

* Statewide average accident rates for functional class and volume group.

Red indicates higher than expected rates of accidents

Figure 2-4: State Road Crash Rates



2 0 2 4 6 8 10 Miles

2.8 Bicycle and Pedestrian

The Federal Highway Administration recognizes the increasingly important role of bicycling and walking in creating a balanced, intermodal transportation system, and encourages state and local governments to incorporate all necessary provisions to accommodate bicycle and pedestrian traffic. In conjunction with Daggett County's General Plan in which they specify the desire to "plan for Daggett County's future", consideration should be given to these alternative transportation modes through adoption of a "complete streets" philosophy. This type of all-inclusive planning process will help to create a more bicycle-friendly and walkable community.

2.8.1 Biking/Trails

Relative to the rural nature of the County, there currently are not any dedicated bike lanes on local or state roads. Many of the roads throughout the County lack adequate shoulder and do not accommodate those bicyclists who choose not to use the travel lane. These conditions have increased the safety concerns of bicyclists and the community. There is a need to provide for both residents and tourists who have demonstrated a desire for easily accessible bicycle facilities. In addition to the casual



user, there are organized bicycle-touring groups, such as Boy Scout troops and Habitat for Humanity, which occasionally travel through Daggett County.

There is a need in the County to provide for both the on-street cyclist and mountain biking enthusiasts. One mountain biking activity that continues to be successful in the area is held yearly in August and is sponsored by the Red Canyon Lodge. The County recognizes that recreation is one of the main draws for the area and, as identified in the General Plan, they would like to increase recreational and entertainment opportunities.

There are a number of trails within the County and these have been documented in a newsletter type magazine that is available to the public. The trails that are currently in place are fragmented and do not provide a connected system. There are a number of Off Highway Vehicle (OHV) riders in Daggett County who also use these trails facilities. In addition to the trails that are already on the ground, there is also a proposed trail in the Dutch John area that would provide access to a number of destinations around the City.

2.8.2 Pedestrian

Daggett County has very few sidewalks in place that can accommodate pedestrian traffic. The sidewalk placements that are available are fragmented and do not provide a connected transportation system. The County has expressed a desire to install additional sidewalk and is investigating a variety of funding sources that could help make this a reality. There are a number of pedestrians that consistently use SR-43 in Manila as a

means to travel from the lodging areas to downtown. This is a safety concern for the County due to the high volumes of vehicular traffic and the lack of sidewalk or shoulder along the roadway. Pedestrians also travel this route as a means to access the available hiking trails in the area.

2.9 Public Transportation

There is no public transportation available in Daggett County other than a small minibus operated by the city of Manila for senior citizen outings. Greyhound intercity bus service is available to the north of Daggett County along Interstate Highway 80 with a stop in Rock Springs, Wyoming. Amtrak intercity rail passenger service was discontinued across southern Wyoming in May of 1997. The nearest current Amtrak service is provided by the Chicago to San Francisco “California Zephyr” passenger train with a stop in Salt Lake City. Scheduled primary airline service is available at the Salt Lake City International Airport, which is three hours driving time to the west of Daggett County. Commuter airline service is also available at the Rock Springs Airport, 90 minutes to the northeast.

2.10 Freight

Although there are no large freight-generating industries in Daggett County, considerable freight travels through the region on U.S. Highway 191 and State Routes 43 and 44. As important secondary highway freight routes, these three highways serve as regional freight corridors while also handling increasing long-distance truck traffic.

As the main highway link between the oil and gas fields of the Uintah Basin and the refineries of central Wyoming, considerable oil and gas industry traffic uses U.S. 191 over the Uintah Mountains passing through Daggett County. An increasing number of out-of-state long-haul truckers are using the U.S. 191 route as a “short-cut” between I-80 and I-70 through northeastern Utah, not realizing that this is not a suitable, all-weather truck route.

U.S. 191 is frequently closed by winter blizzards on the Wyoming portion of the route, which extends from I-80 west of Rock Springs to a point just north of Dutch John. This route also involves a steep, twisting descent from Greendale Junction, where US 191 splits from S.R. 44, to where the highway crosses the top of Flaming Gorge Dam. Currently, when this highway is closed by weather conditions, trucks using the route are not aware of that closure until they have dropped downgrade from Greendale Junction, crossed the dam, and reached a Wyoming-controlled “road closed” sign north of Dutch John. The addition of a second warning sign at Greendale Junction would improve safety and freight mobility, and allow trucks to use a more suitable, all-weather-maintained route via Manila. Taking S.R. 44 beyond Greendale Junction to Manila, then heading northeast on S.R. 43 to Wyoming State Highway 530 to Green River, is the superior truck route through Daggett County.

There is no railroad service in Daggett County, with the nearest rail freight service provided by the Union Pacific Railroad at their freight yard in Green River, Wyoming, about 45 miles to the north.

Considerable freight passes through Daggett County via pipelines. Oil, natural gas, carbon dioxide, and phosphate slurry all use various pipeline corridors through the eastern end of the county. The main natural gas transmission pipeline from Texas and Oklahoma to the Pacific Northwest crosses the Green River at Browns Park, about 14 miles downstream from Flaming Gorge Dam. Simplot & Farmlands Phosphate sends phosphate products in slurry form from their mine north of Vernal on the south slope of the Uintah Mountains to a

processing plant east of Rock Springs. This phosphate slurry pipeline crosses the Green River adjacent to the aforementioned gas pipeline at Browns Park, and keeps more than 500 trucks per day off the U.S. 191 corridor over the Uintah Mountains.

2.11 Aviation Facilities & Operations

There are two public airports in Daggett County, located at Manila and Dutch John.

MANILA AIRPORT: At an elevation of 6175 feet, the Manila Airport is located two miles east of Manila on Airport Road just off State Route 43. The airport is equipped with a single runway, #7/25, which is paved with coated chip seal. Runway 7/25 is 5300 feet long, 60 feet wide, and is equipped with pilot-activated lighting. Pilots approaching the Manila Airport at night tune their radio to 122.8 and click the mike 5 times to activate the airports light systems.



The Manila Airport is also equipped with an airways beacon that is inoperative as of this writing. There is paved parking with tie-downs for 10 aircraft at the Manila Airport, with a small hangar capable of handling two light aircraft on a first-come, first-served basis. There are no electronic navigation aids, control tower, weather information or aircraft fueling and maintenance services available at Manila.

Future plans for the Manila Airport include the installation of a security fence to keep Game off the runway and taxiway, scheduled for 2005. Additionally, repair work on the airways beacon light is scheduled for 2006.

DUTCH JOHN AIRPORT: Located at an elevation of 6561 feet on a bluff overlooking the town of Dutch John, this airport was originally built with three runways, but only one runway remains maintained for service. Runway #11/29 is 6600 feet long, 60 feet wide, and paved asphalt. There is paved parking with tie-downs for eight aircraft, and unpaved parking for 10 aircraft. The Dutch John Airport is not equipped with runway or taxiway lights, an airways beacon light, control tower, or electronic navigation aids.



Fuel and maintenance services are not available at the Dutch John Airport, which is seeing an increasing number of corporate/business jet traffic of out-of-state local landowners. These aircraft must fly to the Vernal, Utah airport for fuel and other services after discharging their passengers. Also, business-type jet aircraft are unable to take-off from Dutch John with a full fuel load due to “density altitude” issues which reduce aircraft lift and jet engine performance at high altitude airfields on warm summer days.

2.12 Revenue

Maintenance of existing transportation facilities and construction of new facilities come primarily from revenue sources that include the Daggett County general fund, federal funds and State Class C funds.

Financing for local transportation projects consists of a combination of federal, state, and local revenues. However, this total is not entirely available for transportation improvement projects, since annual operating and maintenance costs must be deducted from the total revenue. In addition, the County is limited in their ability to subsidize the transportation budget from general fund revenues.

2.12.1 State Class B and C Program

The distribution of Class B and C Program monies is established by state legislation and is administered by the State Department of Transportation. Revenues for the program are derived from State fuel taxes, registration fees, driver license fees, inspection fees, and transportation permits. Twenty-five percent of the funds derived from the taxes and fees are distributed to cities and counties for construction and maintenance programs.

Class B and C funds are allocated to each city and county by the following formula: 50% based on the population ratio of the local jurisdiction with the population of the State, 50% based on the ratio that the Class B roads weighted mileage within each county and the class C roads weighted mileage within each municipality bear to the total class B and Class C roads weighted mileage within the state. Weighted means the sum of the following: (i) paved roads multiplied by five; (ii) graveled road miles multiplied by two; and (iii) all other road types multiplied by one. (Utah Code 72-2-108) For more information go to UDOT's homepage @ www.udot.utah.gov, tab on "Doing Business" select the tab for "Local Government Assistance" here you will find the Regulations governing Class B&C funds

The table below identifies the ratio used to determine the amount of B and C funds allocated.

Apportionment Method of Class B and C Funds

Based on	Of
50%	Roadway Mileage *Based on Surface Type Classification (Weighted Measure) Pave Road (X 5) Graveled Road (X 2) Other Road (X 1)
50%	Total Population

Class B and C funds can be used for maintenance and construction of highways, however thirty percent of the funds must be used for construction or maintenance projects that exceed \$40,000. Class B and C funds can also be used for matching federal funds or to pay the principal, interest, premiums, and reserves for issued bonds.

Daggett County received \$357,898.75 in 2003 for its Class C fund allocation.

2.12.2 Federal Funds

There are federal monies that are available to cities and counties through federal-aid program. The funds are administered by the Utah Department of Transportation. In order to be eligible, a project must be listed on the five-year Statewide Transportation Improvement Program (STIP).

The Surface Transportation Program (STP) provides funding for any road that is functionally classified as a collector street or higher. STP funds can be used for a range of projects including rehabilitation and new construction. The Joint Highway Committee programs a portion of the STP funds for projects around the State for urban areas. A portion of the STP funds can be used in any area of the State, at the discretion of the State Transportation Commission.

Transportation Enhancement funds are allocated based on a competitive application process. The Transportation Enhancement Advisory Committee reviews the applications and then a portion of those are recommended to the State Transportation Commission for funding. Transportation enhancements include 12 categories ranging from historic preservation, bicycle and pedestrian facilities to water runoff mitigation. Other funds that are available are State Trails Funds, administered by the Division of Wildlife Resources.

The amount of money available for projects specifically in the study area varies each year depending on the planned projects in UDOT's Region Three. As a result, federal aid program monies are not listed as part of the study area's transportation revenue.

2.12.3 Local Funds

Daggett County, like most counties, has utilized general fund revenues in its transportation program. Other options available to improve the County's transportation facilities could involve some type of bonding arrangement, either through the creation of a redevelopment district or a special improvement district. These districts are organized for the purpose of funding a single, specific project that benefits and identifiable group of properties. Another source is through general obligation bonding arrangements for projects felt to be beneficial to the entire entity issuing the bonds.

2.12.4 Private Sources

Private interests often provide alternative funding for transportation improvements. Developers construct the local streets within the subdivisions and often dedicate right-of-way and participate in the construction of collector or arterial streets adjacent to their developments. Developers can be considered as an alternative source of funds for projects because of the impacts of the development, such as the need for traffic signals or street widening. Developers should be expected to mitigate certain impacts resulting from their developments. The need for improvements, such as traffic signals or street widening can be mitigated through direct construction or impact fees.

3. Future Conditions

3.1. Land Use and Growth

Daggett County's Transportation Master Plan must be responsive to current and future needs of the area. The area's growth must be estimated and incorporated into the evaluation and analysis of future transportation needs. This is done by:

- Forecasting future population, employment, and land use;
- Projecting traffic demand;
- Forecasting roadway travel volumes;
- Evaluating transportation system impacts;
- Documenting transportation system needs; and
- Identifying improvements to meet those needs.

This chapter summarizes the population, employment, and land use projections developed for the project study area. Future traffic volumes for the major roadway segments are based on projections utilizing 20 years of traffic count history. The forecasted traffic data are then used to identify future deficiencies in the transportation system.

3.1.1 Population and Employment Forecasts

The Governor's Office of Planning and Budget develop population and employment projections. The current population and employment levels, as well as the future projections for each are shown for Manila and Daggett County in the following table.

Population and Employment

Year	City	County	
	Population	Population	Employment
2000	298	921	413
2030	289	937	661

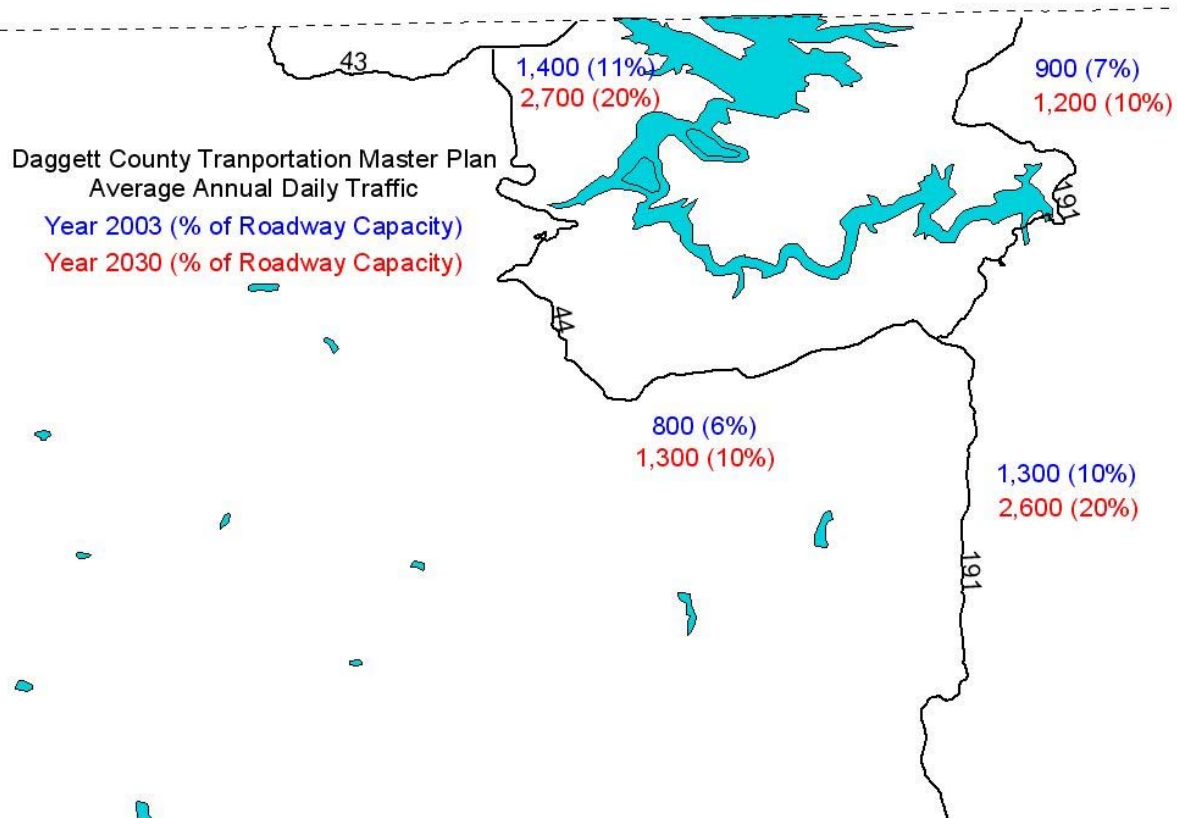
3.1.2 Future Land Use

Some areas for developments were discussed during the course of the Transportation Master Plan. Updated Land Use documents can be found in the Daggett County General Plan.

While specific development plans change with time, it is important to note possible areas of development within the Daggett County area. Commercial and industrial growth is also important in understanding transportation needs.

3.2 Traffic Forecast

Traffic in Daggett County is growing and will continue to grow. Although the population projections from the Governors Office of Planning and Budget show a 0.91% annual growth, traffic has historically grown at about 2% to 4%. This is primarily due to the recreational traffic around Flaming Gorge. The map on the following page shows average annual daily traffic for years 2002 and 2030. Also shown is the percentage of the roadway capacity the traffic will reach. The map illustrates that none of the corridors will have capacity issues in the next 30 years.



Traffic Forecast Sheets

2003

2030



Route

US 191

Limits

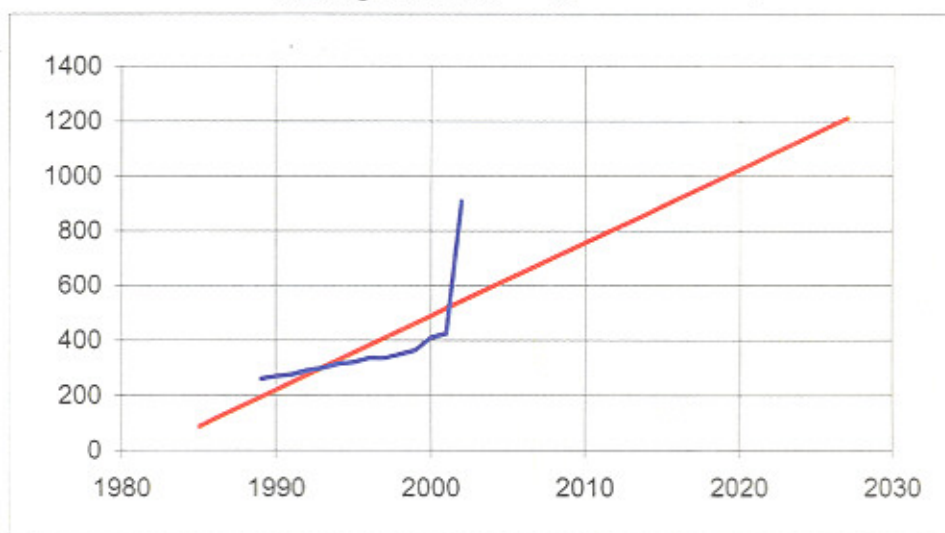
Flaming Gorge Dam to State Line

Year	AADT	Forecast
1985		87
1986		114
1987		141
1988		168
1989	260	194
1990	270	221
1991	275	248
1992	290	275
1993	300	301
1994	315	328
1995	320	355
1996	335	382
1997	335	409
1998	350	435
1999	365	462
2000	410	489
2001	425	516
2002	907	542
2003		569
2004		596
2005		623
2006		649
2007		676
2008		703
2009		730
2010		757
2011		783
2012		810
2013		837
2014		864
2015		890
2016		917
2017		944
2018		971
2019		997
2020		1024
2021		1051
2022		1078
2023		1105
2024		1131
2025		1158
2026		1185
2027		1212

17% Trucks

Projection based on 1989 to 2003 data

5.2% growth rate → 27 vehicles/year



Notes

11/2/2004



Route
Limits

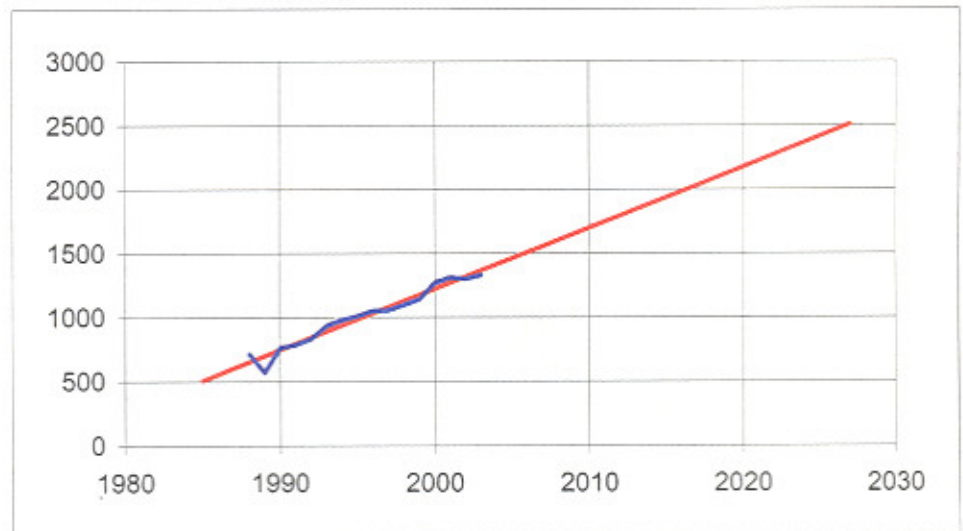
US 191

Uintah County Line to Flaming Gorge Dam

Year	AADT	Forecast
1985		509
1986		556
1987		604
1988	715	651
1989	570	699
1990	760	747
1991	785	794
1992	830	842
1993	935	889
1994	980	937
1995	1,010	985
1996	1,050	1032
1997	1,053	1080
1998	1,095	1127
1999	1,140	1175
2000	1,270	1222
2001	1,310	1270
2002	1,300	1318
2003	1,330	1365
2004		1413
2005		1460
2006		1508
2007		1556
2008		1603
2009		1651
2010		1698
2011		1746
2012		1793
2013		1841
2014		1889
2015		1936
2016		1984
2017		2031
2018		2079
2019		2127
2020		2174
2021		2222
2022		2269
2023		2317
2024		2365
2025		2412
2026		2460
2027		2507

24% Trucks

Projection based on 1988 to 2003 data
3.7% growth rate → 48 vehicles/year



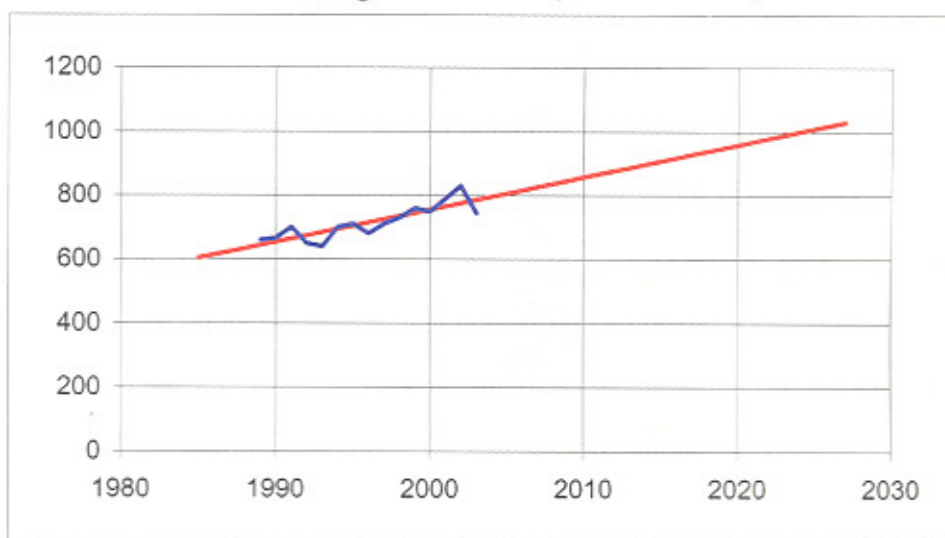
Notes



Route SR 43
 Limits from State Line to Manila

Year	AADT	Forecast
1985		603
1986		613
1987		623
1988		633
1989	660	643
1990	665	653
1991	700	664
1992	650	674
1993	640	684
1994	700	694
1995	710	704
1996	680	715
1997	710	725
1998	730	735
1999	760	745
2000	750	755
2001	790	766
2002	830	776
2003	745	786
2004		796
2005		806
2006		817
2007		827
2008		837
2009		847
2010		857
2011		868
2012		878
2013		888
2014		898
2015		908
2016		919
2017		929
2018		939
2019		949
2020		959
2021		970
2022		980
2023		990
2024		1000
2025		1010
2026		1021
2027		1031

Projection based on 1989 to 2003 data
 1.3% growth rate → 10 vehicles/year



5% Trucks

Notes



Route

SR 43

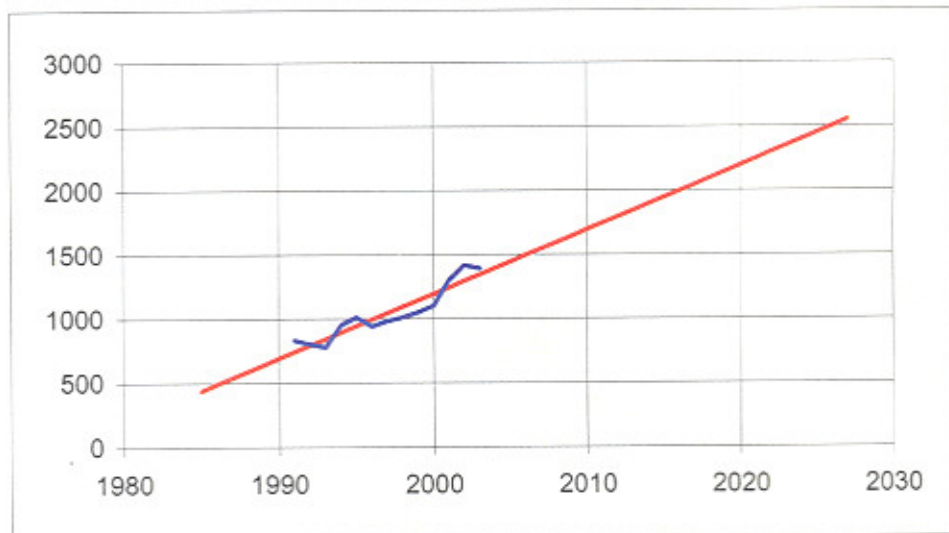
Limits

from Manila to State Line

Year	AADT	Forecast
1985		440
1986		490
1987		540
1988		591
1989		641
1990		691
1991	830	741
1992	800	791
1993	775	842
1994	950	892
1995	1,010	942
1996	940	992
1997	980	1042
1998	1,010	1092
1999	1,050	1143
2000	1,100	1193
2001	1,300	1243
2002	1,415	1293
2003	1,390	1343
2004		1394
2005		1444
2006		1494
2007		1544
2008		1594
2009		1645
2010		1695
2011		1745
2012		1795
2013		1845
2014		1896
2015		1946
2016		1996
2017		2046
2018		2096
2019		2147
2020		2197
2021		2247
2022		2297
2023		2347
2024		2397
2025		2448
2026		2498
2027		2548

Projection based on 1991 to 2003 data

4.0% growth rate → 50 vehicles/year



5% Trucks

Notes

11/2/2004



Route

SR 44

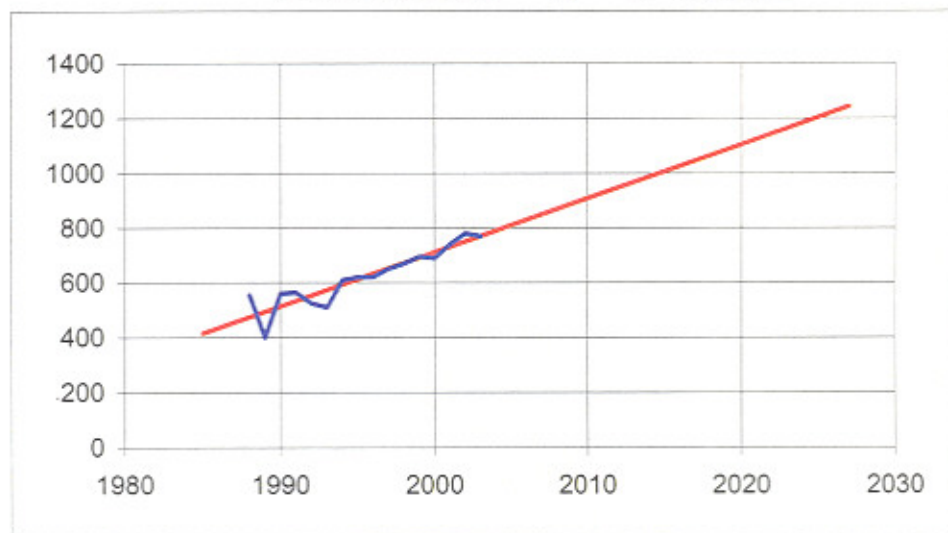
Limits

Manila to US 191

Year	AADT	Forecast
1985		416
1986		436
1987		455
1988	555	475
1989	400	495
1990	560	514
1991	565	534
1992	525	554
1993	510	573
1994	610	593
1995	620	613
1996	620	632
1997	650	652
1998	670	672
1999	695	691
2000	690	711
2001	740	731
2002	780	750
2003	770	770
2004		790
2005		809
2006		829
2007		849
2008		868
2009		888
2010		908
2011		927
2012		947
2013		967
2014		987
2015		1006
2016		1026
2017		1046
2018		1065
2019		1085
2020		1105
2021		1124
2022		1144
2023		1164
2024		1183
2025		1203
2026		1223
2027		1242

Projection based on 1988 to 2003 data

2.7% growth rate → 20 vehicles/year



Notes

11/2/2004

4. Planning Issues and Guidelines

Provided below is a discussion of various issues with a focus on elements that promote a safe and efficient transportation system in the future.

4.1 Guidelines and Policies

These guidelines address certain areas of concern that are applicable to Daggett County's Transportation Master Plan.

4.1.1 Access Management

This section will define and describe some of the aspects of Access Management for roadways and why it is so important. Access Management can make many of the roads in a system work better and operate more safely if properly implemented. There are many benefits to properly implemented access management. Some of the benefits follow:

- Reduction in traffic conflicts and accidents
- Reduced traffic congestion
- Preservation of traffic capacity and level of service
- Improved economic benefits businesses and service agencies
- Potential reductions in air pollution from vehicle exhausts

4.1.1.1 Definition

Access management is the process of comprehensive application of traffic engineering techniques in a manner that seeks to optimize highway system performance in terms of safety, capacity, and speed. Access Management is one tool of many that makes a traffic system work better with what is available.

4.1.1.2 Access Management Techniques

There are many techniques that can be used in access management. The most common techniques are signal spacing, street spacing, access spacing, and interchange to crossroad access spacing. There are various distances for each spacing, dependant upon the roadway type being accessed and the accessing roadway. UDOT has developed an access management program and more information can be gathered from the UDOT website and from the Access Management Program Coordinator.

4.1.1.3 Where to Use Access Management

Access Management can be used on any roadway. In some cases, such as State Highways, access management is a requirement. Access management can be used as an inexpensive way to improve performance on a major roadway that is increasing in volume. Access management should be used on new roadways and roadways that are to be improved so as to prolong the usefulness of the roadway.

4.1.2 Context Sensitive Solutions

Context Sensitive Solutions (CSS) addresses the need, purpose, safety and service of a transportation project, as well as the protection of scenic, aesthetic, historic, environmental and other community values. CSS is an approach to transportation solutions that find, recognize and incorporate issues/factors that are part of the larger

context such as the physical, social, economic, political and cultural impacts. When this approach is used in a project the project become better for all of the entities involved.

4.1.3 Recommended Roadway Cross Sections

Cross sections are the combination of the individual design elements that constitute the design of the roadway. Cross section elements include the pavement surface for driving and parking lanes, curb and gutter, sidewalks and additional buffer/landscape areas. Right-of-way is the total land area needed to provide for the cross section elements. Suggested types of cross-sections can be found in figure 4-1.

The design of the individual roadway elements depends on the intended use of the facility. Roads with higher design volumes and speeds need more travel lanes and wider right-of-way than low volume, low speed roads. The high use roadway type should include wider shoulders and medians, separate turn lanes, dedicated bicycle lanes, elimination of on street parking, and control of driveway access. For most roadways, an additional buffer area is provided beyond the curb line. This buffer area accommodates the sidewalk area, landscaping, and local utilities. Locating the utilities outside the traveled way minimizes traffic disruption in utility repairs or changes in service are needed.

Federal Highway standard widths apply on the all roads that are part of the state highway system. Also, all federally funded roadways in Daggett County must adhere to the same standards for widths and design.

4.2 Bicycles and Pedestrians

4.2.1 Bicycles/Trails

Bicycles are allowed on all roadways, except where legally prohibited, and as such should be a consideration on all roads that are being designed and constructed, and as roadway improvements are taking place. To increase the level of interest in bicycling in the Daggett County area, the County should encourage developers to include separate bicycle/pedestrian pathways in all new developments. This recommendation is in line with the General Plan, which states that “developers should provide infrastructure” to create facilities that will benefit the community. Opportunities to include bike lanes and increased shoulder-width in conjunction with a roadway project should be taken whenever technically, environmentally, and financially feasible.



The County is encouraged to proceed with plans to develop off-street bicycle and OHV trails, as referred to in Section 2.8 of this Plan. As all new trails systems are planned, designed, and constructed, it is important to note that connectivity of the trails should be a consideration. With input from the community, a review of the connectivity of the trails should play an integral role in the decision making process for potential projects. In order

to enhance the quality of life for those in the community, the trails should be accessible to all users and incorporate ADA requirements.

The trails, when constructed, may have slight variances in application type due to possible differences in the terrain at a specific trail location or differing user needs. However, regardless of the design type, the applicable design standards found in the latest version of the AASHTO Guide for the Development of Bicycle Facilities should be followed, as well as the Manual on Uniform Traffic Control Devices (MUTCD) guidelines for appropriate signage of the trails system.

4.2.2 Pedestrians

Every effort should be made to accommodate pedestrians throughout Daggett County. The County should move forward with completion of sidewalk placement where there is a need, as referenced in Section 2.8 of this Plan. An opportunity to include accessible sidewalks, while adhering to ADA requirements, during construction of other projects is encouraged. For the safety and convenience of pedestrian traffic, sidewalk placement should be free from debris and obstructions or impediments such as utility poles, trees, bushes, etc. The County should conduct a sidewalk inventory to document locations where there may be gaps or safety concerns in the sidewalk system. Effort should then be made to construct and complete the sidewalks where gaps or problems occur. The County should require developers to include sidewalk placement or improvements in their respective project plans. The interconnectedness of the County's sidewalk system should be considered as development takes place.

Sidewalks in residential areas should be at least 5-feet wide whenever adequate right-of-way can be secured. This will provide sufficient room and a level of comfort to persons walking in pairs or passing and will specifically allow for persons with strollers or in wheelchairs to pass. On major roadways, sidewalks at least 6-feet wide and with a 6 to 10-foot park strip are desirable. In pedestrian-focused areas, such as schools, parks, sports venues or theaters, and in hotel and market districts, even wider sidewalks are recommended to accommodate and encourage a higher level of pedestrian activity, especially where tourist use would be expected. To ensure consistency of sidewalks throughout the area, UDOT's approved standard for sidewalks should be followed.

As mentioned in Section 2.8 of this Plan, the County has expressed a desire to complete their sidewalk system and is actively pursuing funding sources that can help facilitate this activity. There may be opportunity for Daggett County to make improvements to their sidewalk system through the Utah Department of Transportation's Safe Sidewalk Program, available through the Traffic and Safety Division. The County should contact the UDOT Region 3 office for application requirements.

The County should be aware of, and coordinate with, the area schools that are tasked with developing a routing plan to provide a safe route to school. The routing plan is to be reviewed and updated annually. Information regarding the Safe Routes to School program is available by contacting the Utah Department of Transportation's Traffic and Safety Division.

4.3 Enhancements Program

In 1991, the Intermodal Surface Transportation Efficiency Act (ISTEA) created the Transportation Enhancement program. The program has since been reauthorized in

subsequent bills (i.e. TEA-21). The Transportation Enhancement program provides opportunities to use federal dollars to enhance the cultural and environmental value of the transportation system. These transportation enhancements are defined as follows by TEA-21:

The term ‘transportation enhancement activities’ means, with respect to any project or the area to be served by the project, any of the following activities if such activity relates to surface transportation: provision of facilities for pedestrians and bicycles, provision of safety and educational activities for pedestrians and bicyclists, acquisition of scenic easements and scenic or historic sites, scenic or historic highway programs (including the provision of tourist and welcome center facilities), landscaping and other scenic beautification, historic preservation, rehabilitation and operation of historic transportation buildings, structures, or facilities (including historic railroad facilities and canals), preservation of abandoned railway corridors (including the conservation and use thereof for pedestrian or bicycle trails), control and removal of outdoor advertising, archeological planning and research, environmental mitigation to address water pollution due to highway runoff or reduce vehicle caused wildlife mortality while maintaining habitat connectivity, and establishment of transportation museums.

The Utah Transportation Commission, with the help of an advisory committee, decides which projects will be programmed and placed on the Statewide Transportation Improvement Program (STIP). Applications are accepted in an annual cycle for the limited funds available to UDOT for such projects. Information and Applications for the current cycle can be found on UDOT’s homepage @ www.udot.utah.gov, tab on “Doing Business” select “Planning and Programming”, here you will find a sub-topic entitled “Transportation Enhancement Program”. Applications must be received by the UDOT Program Development Office, on or before the specified date to be considered. Projects will compete on a statewide basis.

4.4 Transportation Corridor Preservation

Transportation Corridor Preservation will be introduced as a method of helping Daggett County’s Transportation Master Plan. This section will define what Corridor Preservation is and ways to use it to help the Transportation Master Plan succeed for the County.

4.4.1 Definition

Transportation Corridor Preservation is the reserving of land for use in building roadways that will function now and can be expanded at a later date. It is a planning tool that will reduce future hardships on the public and the city. The land along the corridor is protected for building the roadway and maintaining the right-of-way for future expansion by a variety of methods, some of which will be discussed here.

4.4.2 Corridor Preservation Techniques

There are three main ways that a transportation corridor can be preserved. The three ways are acquisition, police powers, and voluntary agreements and government inducements. Under each of these are many sub-categories. The main methods will be discussed here, with a listing of some of the sub-categories.

4.4.2.1 Acquisition

One way to preserve a transportation corridor is to acquire the property outright. The property acquired can be developed or undeveloped. When the city is able to acquire undeveloped property, the city has the ability to build without greatly impacting the public. On the other hand, acquiring developed land can be very expensive and can create a negative image for the County. Acquisition of land should be the last resort in any of the cases for Transportation Corridor Preservation. The following is a list of some ways that land can be acquired.

- Development Easements
- Public Land Exchanges
- Private Land Trusts
- Advance Purchase and Eminent Domain
- Hardship Acquisition
- Purchase Options

4.4.2.1 Exercise of Police Powers

Police powers are those ordinances that are enacted by a municipality in order to control some of the aspects of the community. There are ordinances that can be helpful in preserving corridors for the Transportation Master Plan. Many of the ordinances that can be used for corridor preservation are for future developments in the community. These can be controversial, but can be initially less intrusive.

- Impact Fees and Exactions
- Setback Ordinances
- Official Maps or Maps of Reservation
- Adequate Public Facilities and Concurrency Requirements

4.4.2.2 Voluntary Agreements and Governmental Inducements

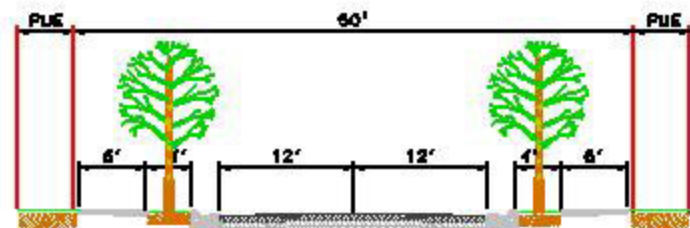


Voluntary agreements and governmental inducements rely on the good will of both the developers and the municipality. Many times it is a give and take situation where both parties could benefit in the end. The developer will likely have a better-developed area and the municipality will be able to preserve the corridor for transportation in and around the development. Listed below are some of the voluntary agreements and governmental

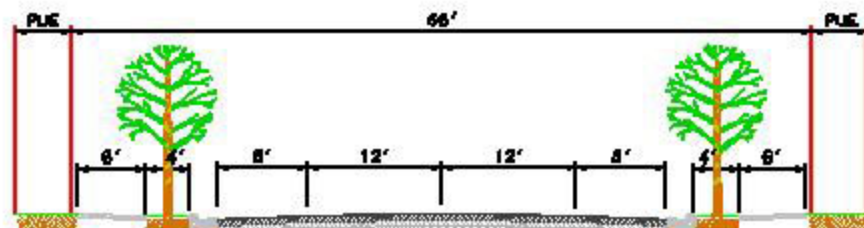
inducements that can be used in order to preserve transportation corridors in the city limits.

- Voluntary Platting
- Transfer of Development Rights
- Tax Abatement
- Agricultural Zoning

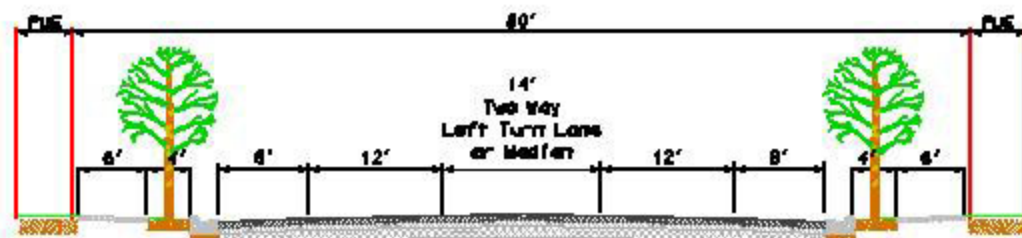
Each of these methods has its place, but there is an order that any government should try to use. Voluntary agreements and government inducements should be used, if possible, before any police powers are used. Police powers should be tried before acquisition is sought. UDOT has developed a toolkit to aid in corridor preservation techniques. This toolkit contains references to Utah code and examples of how the techniques have been used in the past.



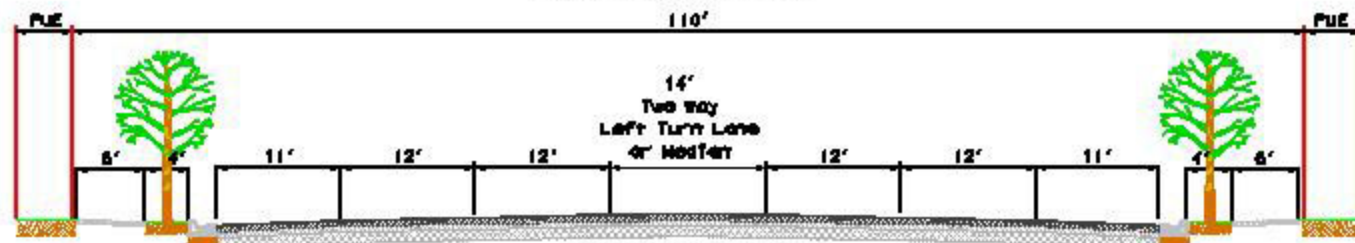
Two-Lane Cross Section
24 feet MAXIMUM ASPHALT WIDTH



Two Lane Cross Section
With Shoulders
Spaced between Arterials



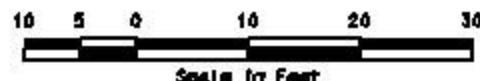
Three Lane Cross Section
With Shoulder
Spaced between Arterials



Five Lane Cross Section
With Shoulders
Minimum spacing approximately 1/4 mile

Notes:

1. Shoulder Dimension varies from 4' to 8' (See UDOT Std. Dev. 011 Note 3)
2. Public Utility Easement (PUE) dimension varies from 2.5' to 12' Typical
3. Shoulder Dimensions:
on 60' ROW - varies from 8' to 12'
on 110' ROW - varies from 10' to 12'
See AASHTO & Policy on Geometric Design of Highways and Streets



**Suggested
Typical cross Section**

Revised: September 16, 2004

5.0 Transportation Improvement Projects

5.1 Current Statewide Transportation Improvement Program (2004-2008 STIP)

At the present time there are several projects under consideration and investigation in the Daggett County area. Currently in the STIP are the following Projects:

- US-191; Cart Creek Arch, Bridge Rehabilitation # C-372
- Brown's Park Road; MP 15 to 20, Asphalt Pavement New Construction (Local Governments)

Also, this project is currently listed on the State of Utah's Long Range Plan, Utah Transportation 2030:

- Dutch John – Runway Reconstruction (Phase 1)

5.2 Recommended Projects



The following list identifies the eight projects that have been identified as having the highest priority to the Daggett County Transportation Advisory Committee. These needs were identified through a series of meetings where the TAC identified the needs and set priorities for projects. The following list contains the top priorities of the TAC

- 4-way Stop Sign Warrant Study at SR-43 and SR-44
- Rebuild Sheep Creek Geologic Loop
- Subdivision Special Service

District Roads Improvements

- Widen Shoulders on SR-43
- Paving of City Streets in Manila
- Cattle on Roadway on SR-44 (Open Range Grazing)
- Bicycle/Pedestrian Trail Through Manila
- Advance Automated Road Closed Warning Sign at Greendale Junction

Additionally, many concerns and issues were identified which are found on the attached list.

Transportation Needs and Cost Estimates

		Project Description / Concept			Length or Quantity	Improvement	Estimated Project Unit Cost	Estimated Cost
County	Route	State Highway Projects (LRP)	Start Point	End Point				
Daggett	43	Widen Shoulders on SR-43	Wyoming	Wyoming	10.6 mi	Add Shoulders	\$318,000	\$3,370,800
Daggett	44	Widen Shoulders on SR-44	Manila	US-191	28 mi	Add Shoulders	\$318,000	\$8,904,000
		State Highway Projects (Operational)						
Daggett	191/44	Advance Automated Road Closed Warning Sign at Greendale Junction			1 ea	Safety	\$5,000	\$5,000
Daggett	44	Improve Warning Signage for Trucks/RVs on SR-44 on Sheep Creek Grade			1 lump	Safety	\$5,000	\$5,000
Daggett	44	Fencing and Warning Signage for Cattle on Roadways			37 mi	Safety	\$7,500	\$277,500
Daggett	191	Rehabilitate Cart Creek Bridge			1 lump	Maintenance	\$2,300,000	\$2,300,000
		Local Highway Projects						
		Reconstruct Sheep Creek Geologic Loop			13 mi	Reconstruct	\$1,000,000	\$13,000,000
		Subdivision Special Service District Roads Improvements			2.5 mi	Gravel	\$125,000	\$312,500
		Paving of City Streets in Manila			5.5 mi	Pavement	\$185,000	\$1,017,500
		Pave Birch Creek Road			4.6 mi	Pavement	\$150,000	\$690,000
		Pave and Widen State Line Road			3.7 mi	Reconstruct	\$250,000	\$925,000
		Pave South Valley Road			2 mi	Pavement	\$150,000	\$300,000
		Rebuild Chetteville Road (County Road 12)			1 mi	Reconstruct	\$250,000	\$250,000
		Rebuild and Pave Brown Park Road			13 mi	Reconstruct	\$1,750,000	\$22,750,000
		New Entrance Road to Dutch John Airport			0.75 mi	Reconstruct	\$500,000	\$375,000
		Rebuild Conner Basin Road			2 mi	Reconstruct	\$250,000	\$500,000
		Improve Lynwood Road (Airport Road)			1 mi	Pavement	\$150,000	\$150,000
		Improve Drainage and Pave Pines Road			1 mi	Pavement	\$150,000	\$150,000
		Improve Drainage and Pave Acres Road			1.5 mi	Pavement	\$150,000	\$225,000
		Gravel Sols Canyon Road			4.6 mi	Gravel	\$100,000	\$460,000
		Gravel Fish and Game Road			4.4 mi	Gravel	\$100,000	\$440,000
		Improve Drainage and Gravel Little Hole Road (County Road 30)			5 mi	Gravel	\$125,000	\$625,000
		Improve Drainage and Gravel Crouse Creek Road			8 mi	Gravel	\$125,000	\$1,000,000
		Improve Drainage and Gravel Pot Creek Road			9.2 mi	Gravel	\$125,000	\$1,150,000
		Improve and Gravel Dump Road			1.25 mi	Gravel	\$125,000	\$156,250
		Bridge to Link Dutch John to Manila			18 mi	New Road Construction	\$16,667,000	\$300,006,000
		Rebuild Taylor's Flat Bridge			1 ea	New Bridge	\$20,000,000	\$20,000,000
		Improve Street Lighting for Manila			12 ea	New Lighting	\$12,500	\$150,000
		Downtown Manila Gateway for Traffic Calming			1 lump	New Enhancement	\$75,000	\$75,000
		New Storm Water Collection System			3 mi	New Drainage	\$250,000	\$750,000
		Pedestrian/ Bicycle Projects						
		Bicycle/Pedestrian Trail Through Manila			2 mi	New Trails	\$132,000	\$264,000
		Bicycle/Pedestrian Trail from Schools to South of Town			4 mi	New Trails	\$132,000	\$528,000
		Bicycle/Pedestrian Trail from Manila to Duck Ponds			4 mi	New Trails	\$132,000	\$528,000
		Bicycle/Pedestrian Trail Through Dutch John			4 mi	New Trails	\$132,000	\$528,000
		Coordinate Trails that link Manila to Dutch John			1 ea	Coordination	\$1,000	\$1,000
		Aviation						
		Add Airways Beacon Light, Runway/Taxiway Lighting at Dutch John Airport			1 lump	New Instrumentation	\$280,000	\$280,000
		Lengthen and Widen Runway at Dutch John Airport			1 lump	New Construction	\$3,000,000	\$3,000,000
		Add Instrument Approach System (IAS) to Dutch John Airport			1 lump	New Instrumentation	\$300,000	\$300,000
		New Airways Beacon Light at Manila Airport			1 lump	New Instrumentation	\$30,000	\$30,000
		Land-Use Planning around Manila Airport			1 lump	Planning	\$5,000	\$5,000
		Alternative Travel Modes						
		Add ATV Warning Signs on Forest Service Roads			1 lump	New Signs	\$10,000	\$10,000
		Birch Creek Road ATV Loading and Unloading Area			1 lump	New Construction	\$50,000	\$50,000
		Studies						
Daggett	43/44	4-way Stop Sign Warrant Study at SR-43 and SR-44			1 ea	Study	\$5,000	\$5,000
		ATV/Snowmobile Study, County Wide			1 ea	Study	\$50,000	\$50,000
		Comprehensive Trail Plan for Daggett County			1 ea	Study	\$50,000	\$50,000
		Safe Routes to Schools for Manila and Dutch John			2 ea	Study	\$5,000	\$10,000
Daggett	43	Speed Limit Study on SR-43 through Manila			1 ea	Study	\$5,000	\$5,000
		Signage Study for County Roads			1 ea	Study	\$5,000	\$5,000
					Estimated Total Needs Costs			\$385,968,550

5.3 Revenue Summary

5.3.1 Federal and State Participation

Federal and State participation is important for the success of implementing these projects. UDOT needs to see the Transportation Master Plan so that they understand what the City wants to do with its transportation system. UDOT can then weigh the priorities of the city against the rest of the state. It is important for Daggett County to promote projects that can be placed on UDOT's five-year Statewide Transportation Improvement Program (STIP) as soon as possible. The process for placing projects into the STIP and funding of these projects can be found at UDOT's homepage @ www.udot.utah.gov, tab on "Doing Business" select the tab for "Planning and Programming" here there is a subtopic entitled "Statewide Transportation Improvement Program (STIP)" that describes this program in detail. Additionally coordination with UDOT's Region Director and Planning Engineer will be practical.

5.3.2 County Participation

The County will fund the local county projects. The local match component and partnering opportunities vary by the funding source.

5.4 Other Potential Funding

Previous sections of this chapter show significant shortfalls projected for the short-range and long-range programs. The following options may be available to help offset all or part of the anticipated shortfalls:

- Increased transportation impact fees.
- Increased general fund allocation to transportation projects.
- General obligation bonds repaid with property tax levies.
- Increased participation by developers, including cooperative programs and incentives.
- Special improvement districts (SIDs), whereby adjacent property owners are assessed portions of the project cost.
- Sales or other tax increase.
- State funding for improvements on the county roadway system.
- Increased gas tax, which would have to be approved by the State Legislature.
- Federal-aid available under one of the programs provided in the federal transportation bill (TEA-21 is the current bill; SAFETEA will likely be passed in late 2004).

Increased general fund allocation means that General Funds must be diverted from other governmental services and/or programs. General obligation bonds provide initial capital for transportation improvement projects but add to the debt service of the governmental agency. One way to avoid increased taxes needed to retire the debt is to sell bonds repaid with a portion of the municipalities' State Class monies for a certain number of years.

Participation by private developers provides a promising funding mechanism for new projects. Developers can contribute to transportation projects by constructing on-site improvements along their site frontage and by paying development fees. Municipalities

commonly require developers to dedicate right-of-way and widen streets along the site frontage. A negative side of the on-site improvements is that the streets are improved in pieces. If there are not several developers adjacent to one another at the same time, a continuous improved road is not provided. One way to overcome this problem is for the jurisdiction to construct the street and charge the developers their share when they develop their property.

Another way developers can participate is through development fees. The fees would be based on the additional improvements required to accommodate the new development and would be proportioned among each development. The expenditure of additional funds provided by the fees would be subject to the County's spending limit. However, development fees are often a controversial issue and may or may not be an appropriate method of funding projects.

